S.

Supporting Information

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PheRS-minimized
ATOM       1  N    VAL A   86     2.63440  16.28353 -19.43173 N_R    3 0 -0.47000
ATOM       2 HN    VAL A   86     2.87037  15.35049 -19.54799 H___A  1 0  0.15500
ATOM       3 HN    VAL A   86     2.25051  16.77977 -20.17161 H___A  1 0  0.15500
ATOM       4  CA   VAL A   86     2.84244  16.91809 -18.17657 C_3    4 0  0.16000
ATOM       5 HCA   VAL A   86     2.19305  16.37686 -17.47939 H_     1 0  0.00000
ATOM       6  C    VAL A   86     2.39545  18.34170 -18.21205 C_R    3 0  0.51000
ATOM       7  O    VAL A   86     2.89809  19.14638 -19.03723 O_2    1 2 -0.51000
ATOM       8  CB   VAL A   86     4.31281  16.71008 -17.66894 C_3    4 0  0.00000
ATOM       9 HCB   VAL A   86     4.46448  15.62775 -17.58402 H_     1 0  0.00000
ATOM      10  CG1  VAL A   86     5.40818  17.21910 -18.64909 C_3    4 0  0.00000
ATOM      11 HCG1  VAL A   86     5.33956  18.29564 -18.79076 H_     1 0  0.00000
ATOM      12 HCG1  VAL A   86     6.40095  16.99016 -18.25813 H_     1 0  0.00000
ATOM      13 HCG1  VAL A   86     5.31102  16.73060 -19.61937 H_     1 0  0.00000
ATOM      14  CG2  VAL A   86     4.53011  17.28973 -16.24319 C_3    4 0  0.00000
ATOM      15 HCG2  VAL A   86     3.82652  16.83860 -15.54106 H_     1 0  0.00000
ATOM      16 HCG2  VAL A   86     5.54087  17.07380 -15.89271 H_     1 0  0.00000
ATOM      17 HCG2  VAL A   86     4.38680  18.37133 -16.23500 H_     1 0  0.00000
ATOM      18  N    ASP A   87     1.45479  18.76809 -17.33257 N_R    3 0 -0.47000
ATOM      19 HN    ASP A   87     1.08555  18.11379 -16.72180 H___A  1 0  0.31000
ATOM      20  CA   ASP A   87     0.98706  20.11592 -17.20333 C_3    4 0  0.16000
ATOM      21 HCA   ASP A   87     0.85487  20.52196 -18.21375 H_     1 0  0.00000
ATOM      22  C    ASP A   87     1.98273  20.97194 -16.48815 C_R    3 0  0.51000
ATOM      23  O    ASP A   87     1.89595  21.27584 -15.27202 O_2    1 2 -0.51000
ATOM      24  CB   ASP A   87    -0.43613  20.13436 -16.58101 C_3    4 0 -0.10000
ATOM      25 HCB   ASP A   87    -0.40551  19.65494 -15.60232 H_     1 0  0.00000
ATOM      26 HCB   ASP A   87    -1.11107  19.54942 -17.21217 H_     1 0  0.00000
ATOM      27  CG   ASP A   87    -1.00892  21.49290 -16.44566 C_R    3 0  0.62000
ATOM      28  OD1  ASP A   87    -0.39308  22.50349 -16.85806 O_2    1 2 -0.76000
ATOM      29  OD2  ASP A   87    -2.11925  21.65443 -15.89347 O_2    1 2 -0.76000
ATOM      30  N    VAL A   88     2.98075  21.46649 -17.24411 N_R    3 0 -0.47000
ATOM      31 HN    VAL A   88     3.06951  20.99764 -18.08026 H___A  1 0  0.31000
ATOM      32  CA   VAL A   88     3.91564  22.50156 -16.89997 C_3    4 0  0.16000
ATOM      33 HCA   VAL A   88     4.55944  22.07238 -16.12428 H_     1 0  0.00000
ATOM      34  C    VAL A   88     3.33219  23.74995 -16.30320 C_R    3 0  0.51000
ATOM      35  O    VAL A   88     4.16110  24.58678 -15.86861 O_2    1 2 -0.51000
ATOM      36  CB   VAL A   88     4.82177  22.82958 -18.14139 C_3    4 0  0.00000
ATOM      37 HCB   VAL A   88     5.52326  23.62039 -17.85428 H_     1 0  0.00000
ATOM      38  CG1  VAL A   88     5.71110  21.62607 -18.56453 C_3    4 0  0.00000
ATOM      39 HCG1  VAL A   88     5.09886  20.78069 -18.87351 H_     1 0  0.00000
ATOM      40 HCG1  VAL A   88     6.35808  21.90401 -19.39843 H_     1 0  0.00000
ATOM      41 HCG1  VAL A   88     6.34715  21.31364 -17.73441 H_     1 0  0.00000
ATOM      42  CG2  VAL A   88     4.01125  23.36960 -19.35432 C_3    4 0  0.00000
ATOM      43 HCG2  VAL A   88     3.47107  24.27676 -19.07837 H_     1 0  0.00000
ATOM      44 HCG2  VAL A   88     4.68029  23.61659 -20.18036 H_     1 0  0.00000
ATOM      45 HCG2  VAL A   88     3.29119  22.62762 -19.70296 H_     1 0  0.00000
ATOM      46  N    SER A   89     2.00165  24.01294 -16.17139 N_R    3 0 -0.47000
ATOM      47 HN    SER A   89     1.33605  23.39867 -16.50095 H___A  1 0  0.31000
ATOM      48  CA   SER A   89     1.43443  25.14750 -15.48766 C_3    4 0  0.16000
ATOM      49 HCA   SER A   89     2.22094  25.84919 -15.19436 H_     1 0  0.00000
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ATOM      50  C    SER A   89     0.77857  24.75466 -14.20527 C_R    3 0  0.51000
ATOM      51  O    SER A   89     0.11949  25.62501 -13.58419 O_2    1 2 -0.51000
ATOM      52  CB   SER A   89     0.50113  25.95472 -16.43743 C_3    4 0  0.23000
ATOM      53 HCB   SER A   89     0.97663  26.07379 -17.41341 H_     1 0  0.00000
ATOM      54 HCB   SER A   89     0.33850  26.95423 -16.02699 H_     1 0  0.00000
ATOM      55  OG   SER A   89    -0.77980  25.36812 -16.63424 O_3    2 2 -0.66000
ATOM      56 HOG   SER A   89    -1.09420  25.18252 -15.72541 H___A  1 0  0.43000
ATOM      57  N    LEU A   90     0.92986  23.52489 -13.64505 N_R    3 0 -0.47000
ATOM      58 HN    LEU A   90     1.30210  22.82301 -14.18753 H___A  1 0  0.31000
ATOM      59  CA   LEU A   90     0.60129  23.20994 -12.27422 C_3    4 0  0.16000
ATOM      60 HCA   LEU A   90    -0.44246  23.47810 -12.13640 H_     1 0  0.00000
ATOM      61  C    LEU A   90     1.45336  23.94543 -11.28036 C_R    3 0  0.51000
ATOM      62  O    LEU A   90     2.66786  24.09059 -11.56574 O_2    1 2 -0.51000
ATOM      63  CB   LEU A   90     0.75258  21.68196 -11.99095 C_3    4 0  0.00000
ATOM      64 HCB   LEU A   90     0.70537  21.49613 -10.91177 H_     1 0  0.00000
ATOM      65 HCB   LEU A   90     1.75387  21.38200 -12.32001 H_     1 0  0.00000
ATOM      66  CG   LEU A   90    -0.31310  20.76938 -12.67290 C_3    4 0  0.00000
ATOM      67 HCG   LEU A   90    -0.40521  21.08696 -13.70996 H_     1 0  0.00000
ATOM      68  CD1  LEU A   90     0.15129  19.28525 -12.67672 C_3    4 0  0.00000
ATOM      69 HCD1  LEU A   90     0.29834  18.92613 -11.65660 H_     1 0  0.00000
ATOM      70 HCD1  LEU A   90    -0.59106  18.65245 -13.16511 H_     1 0  0.00000
ATOM      71 HCD1  LEU A   90     1.09087  19.18192 -13.22213 H_     1 0  0.00000
ATOM      72  CD2  LEU A   90    -1.72223  20.88592 -12.02601 C_3    4 0  0.00000
ATOM      73 HCD2  LEU A   90    -2.10840  21.90177 -12.10432 H_     1 0  0.00000
ATOM      74 HCD2  LEU A   90    -2.42841  20.22924 -12.53640 H_     1 0  0.00000
ATOM      75 HCD2  LEU A   90    -1.68682  20.60706 -10.97137 H_     1 0  0.00000
ATOM      76  N    PRO A   91     1.02088  24.38978 -10.05666 N_R    3 0 -0.29000
ATOM      77  CA   PRO A   91     1.90669  24.87006  -9.01864 C_3    4 0  0.11000
ATOM      78 HCA   PRO A   91     2.32014  25.82649  -9.36108 H_     1 0  0.00000
ATOM      79  C    PRO A   91     2.99365  23.95686  -8.65109 C_2    3 0  0.51000
ATOM      80  O    PRO A   91     2.73022  22.79544  -8.36291 O_2    1 2 -0.51000
ATOM      81  CB   PRO A   91     0.99466  25.15383  -7.79630 C_3    4 0  0.00000
ATOM      82 HCB   PRO A   91     1.30637  26.05275  -7.25805 H_     1 0  0.00000
ATOM      83 HCB   PRO A   91     0.97070  24.31492  -7.09282 H_     1 0  0.00000
ATOM      84  CG   PRO A   91    -0.39860  25.32218  -8.40745 C_3    4 0  0.00000
ATOM      85 HCG   PRO A   91    -0.55454  26.36521  -8.70003 H_     1 0  0.00000
ATOM      86 HCG   PRO A   91    -1.18917  25.01970  -7.71531 H_     1 0  0.00000
ATOM      87  CD   PRO A   91    -0.35270  24.42132  -9.65205 C_3    4 0  0.18000
ATOM      88 HCD   PRO A   91    -0.69140  23.40972  -9.40769 H_     1 0  0.00000
ATOM      89 HCD   PRO A   91    -1.00352  24.85173 -10.41780 H_     1 0  0.00000
ATOM      90  N    GLY A   92     4.24288  24.38656  -8.60542 N_R    3 0 -0.47000
ATOM      91 HN    GLY A   92     4.39800  25.30517  -8.87044 H___A  1 0  0.31000
ATOM      92  CA   GLY A   92     5.37712  23.62696  -8.16247 C_3    4 0  0.16000
ATOM      93 HCA   GLY A   92     6.26709  24.18461  -8.45861 H_     1 0  0.00000
ATOM      94 HCA   GLY A   92     5.40249  22.66786  -8.68593 H_     1 0  0.00000
ATOM      95  C    GLY A   92     5.45181  23.38707  -6.69750 C_R    3 0  0.51000
ATOM      96  O    GLY A   92     4.55266  23.79759  -5.92549 O_2    1 2 -0.51000
ATOM      97  N    ALA A   93     6.51986  22.72727  -6.18959 N_R    3 0 -0.47000
ATOM      98 HN    ALA A   93     7.19802  22.44651  -6.82229 H___A  1 0  0.31000
ATOM      99  CA   ALA A   93     6.72720  22.39276  -4.80413 C_3    4 0  0.16000
ATOM     100 HCA   ALA A   93     5.91565  21.72143  -4.50356 H_     1 0  0.00000
ATOM     101  C    ALA A   93     6.74510  23.57691  -3.89664 C_R    3 0  0.51000
ATOM     102  O    ALA A   93     7.53455  24.52239  -4.13259 O_2    1 2 -0.51000
ATOM     103  CB   ALA A   93     8.04765  21.59267  -4.67356 C_3    4 0  0.00000
ATOM     104 HCB   ALA A   93     8.89560  22.18427  -5.02495 H_     1 0  0.00000
ATOM     105 HCB   ALA A   93     8.22267  21.31185  -3.63289 H_     1 0  0.00000
ATOM     106 HCB   ALA A   93     7.99295  20.67869  -5.26856 H_     1 0  0.00000
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ATOM    107  N    SER A   94    5.91874  23.64212  -2.82399 N_R    3 0 -0.47000
ATOM    108 HN    SER A   94    5.32921  22.88690  -2.67315 H___A  1 0  0.31000
ATOM    109  CA   SER A   94    5.83893  24.74308  -1.90097 C_3    4 0  0.16000
ATOM    110 HCA   SER A   94    5.71476  25.65527  -2.49487 H_     1 0  0.00000
ATOM    111  C    SER A   94    7.06881  24.88030  -1.05544 C_R    3 0  0.51000
ATOM    112  O    SER A   94    7.31741  24.04973  -0.14450 O_2    1 2 -0.51000
ATOM    113  CB   SER A   94    4.55078  24.62619  -1.03337 C_3    4 0  0.23000
ATOM    114 HCB   SER A   94    3.66284  24.61604  -1.66879 H_     1 0  0.00000
ATOM    115 HCB   SER A   94    4.47914  25.48654  -0.36341 H_     1 0  0.00000
ATOM    116  OG   SER A   94    4.55310  23.44150  -0.24144 O_3    2 2 -0.66000
ATOM    117 HOG   SER A   94    5.48170  23.44973   0.03074 H___A  1 0  0.43000
ATOM    118  N    LEU A   95    7.91855  25.91056  -1.28197 N_R    3 0 -0.47000
ATOM    119 HN    LEU A   95    7.68695  26.49650  -2.01989 H___A  1 0  0.31000
ATOM    120  CA   LEU A   95    9.12033  26.23748  -0.55574 C_3    4 0  0.16000
ATOM    121 HCA   LEU A   95    9.34646  25.45340   0.17293 H_     1 0  0.00000
ATOM    122  C    LEU A   95    8.93265  27.50594   0.21137 C_R    3 0  0.51000
ATOM    123  O    LEU A   95    8.26240  28.45144  -0.27677 O_2    1 2 -0.51000
ATOM    124  CB   LEU A   95   10.33618  26.34867  -1.53877 C_3    4 0  0.00000
ATOM    125 HCB   LEU A   95   11.01736  27.12408  -1.17040 H_     1 0  0.00000
ATOM    126 HCB   LEU A   95    9.98828  26.68702  -2.52090 H_     1 0  0.00000
ATOM    127  CG   LEU A   95   11.19229  25.04979  -1.71248 C_3    4 0  0.00000
ATOM    128 HCG   LEU A   95   11.52159  24.72864  -0.71932 H_     1 0  0.00000
ATOM    129  CD1  LEU A   95   10.41014  23.86847  -2.34791 C_3    4 0  0.00000
ATOM    130 HCD1  LEU A   95   10.05391  24.13766  -3.34215 H_     1 0  0.00000
ATOM    131 HCD1  LEU A   95   11.05201  22.99033  -2.43638 H_     1 0  0.00000
ATOM    132 HCD1  LEU A   95    9.55960  23.58932  -1.72895 H_     1 0  0.00000
ATOM    133  CD2  LEU A   95   12.47521  25.33951  -2.54168 C_3    4 0  0.00000
ATOM    134 HCD2  LEU A   95   13.08352  26.10012  -2.04849 H_     1 0  0.00000
ATOM    135 HCD2  LEU A   95   13.08211  24.43720  -2.63825 H_     1 0  0.00000
ATOM    136 HCD2  LEU A   95   12.21605  25.69409  -3.54154 H_     1 0  0.00000
ATOM    137  N    PHE A   96    9.53507  27.63936   1.42106 N_R    3 0 -0.47000
ATOM    138 HN    PHE A   96   10.06615  26.88379   1.71833 H___A  1 0  0.31000
ATOM    139  CA   PHE A   96    9.48234  28.77564   2.30892 C_3    4 0  0.16000
ATOM    140 HCA   PHE A   96    8.45002  29.13944   2.33853 H_     1 0  0.00000
ATOM    141  C    PHE A   96   10.31305  29.92899   1.84070 C_R    3 0  0.51000
ATOM    142  O    PHE A   96   11.33399  30.32458   2.44982 O_2    1 2 -0.51000
ATOM    143  CB   PHE A   96    9.84334  28.30594   3.75410 C_3    4 0  0.00000
ATOM    144 HCB   PHE A   96    9.98367  29.17429   4.40471 H_     1 0  0.00000
ATOM    145 HCB   PHE A   96   10.80313  27.78112   3.72460 H_     1 0  0.00000
ATOM    146  CG   PHE A   96    8.79248  27.45147   4.37375 C_R    3 0  0.00000
ATOM    147  CD1  PHE A   96    7.56778  28.02710   4.79100 C_R    3 0  0.00000
ATOM    148 HCD1  PHE A   96    7.40087  29.02942   4.67184 H_     1 0  0.00000
ATOM    149  CD2  PHE A   96    8.98890  26.06351   4.56761 C_R    3 0  0.00000
ATOM    150 HCD2  PHE A   96    9.86330  25.61844   4.27956 H_     1 0  0.00000
ATOM    151  CE1  PHE A   96    6.56360  27.23688   5.37919 C_R    3 0  0.00000
ATOM    152 HCE1  PHE A   96    5.68355  27.66555   5.67503 H_     1 0  0.00000
ATOM    153  CE2  PHE A   96    7.98391  25.27268   5.15682 C_R    3 0  0.00000
ATOM    154 HCE2  PHE A   96    8.13502  24.27046   5.29124 H_     1 0  0.00000
ATOM    155  CZ   PHE A   96    6.77132  25.85881   5.56122 C_R    3 0  0.00000
ATOM    156 HCZ   PHE A   96    6.04135  25.28411   5.98845 H_     1 0  0.00000
ATOM    157  N    SER A   97    9.90034  30.57189   0.72914 N_R    3 0 -0.47000
ATOM    158 HN    SER A   97    9.22886  30.06909   0.26631 H___A  1 0  0.31000
ATOM    159  CA   SER A   97   10.39342  31.79940   0.15960 C_3    4 0  0.16000
ATOM    160 HCA   SER A   97   11.28471  31.54078  -0.41975 H_     1 0  0.00000
ATOM    161  C    SER A   97   10.74057  32.87757   1.14574 C_R    3 0  0.51000
ATOM    162  O    SER A   97    9.88894  33.25037   1.99335 O_2    1 2 -0.51000
ATOM    163  CB   SER A   97    9.33114  32.34115  -0.84312 C_3    4 0  0.23000
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ATOM    164 HCB   SER A   97     9.06750  31.57682  -1.57738 H_      1 0  0.00000
ATOM    165 HCB   SER A   97     9.74330  33.19708  -1.38247 H_      1 0  0.00000
ATOM    166  OG   SER A   97     8.13857  32.76624  -0.17772 O_3     2 2 -0.66000
ATOM    167 HOG   SER A   97     8.50991  32.97055   0.69160 H___A   1 0  0.43000
ATOM    168  N    GLY A   98    11.94755  33.48925   1.09943 N_R     3 0 -0.47000
ATOM    169 HN    GLY A   98    12.56617  33.19564   0.41248 H___A   1 0  0.31000
ATOM    170  CA   GLY A   98    12.40139  34.51984   1.99074 C_3     4 0  0.16000
ATOM    171 HCA   GLY A   98    13.47963  34.60027   1.83848 H_      1 0  0.00000
ATOM    172 HCA   GLY A   98    12.24494  34.19187   3.02119 H_      1 0  0.00000
ATOM    173  C    GLY A   98    11.82452  35.88191   1.82376 C_R     3 0  0.51000
ATOM    174  O    GLY A   98    10.94097  36.12162   0.96271 O_2     1 2 -0.51000
ATOM    175  N    GLY A   99    12.29279  36.86602   2.62694 N_R     3 0 -0.47000
ATOM    176 HN    GLY A   99    12.95669  36.60766   3.28736 H___A   1 0  0.31000
ATOM    177  CA   GLY A   99    11.93688  38.25774   2.58681 C_3     4 0  0.16000
ATOM    178 HCA   GLY A   99    10.85181  38.36387   2.65033 H_      1 0  0.00000
ATOM    179 HCA   GLY A   99    12.27239  38.66748   1.63114 H_      1 0  0.00000
ATOM    180  C    GLY A   99    12.54978  39.05111   3.68812 C_R     3 0  0.51000
ATOM    181  O    GLY A   99    13.09566  38.44968   4.64302 O_2     1 2 -0.51000
ATOM    182  N    LEU A  100    12.53470  40.40817   3.66066 N_R     3 0 -0.47000
ATOM    183 HN    LEU A  100    12.11407  40.82503   2.89218 H___A   1 0  0.31000
ATOM    184  CA   LEU A  100    13.07541  41.29679   4.66846 C_3     4 0  0.16000
ATOM    185 HCA   LEU A  100    13.36920  40.73092   5.55343 H_      1 0  0.00000
ATOM    186  C    LEU A  100    12.06873  42.27890   5.17084 C_R     3 0  0.51000
ATOM    187  O    LEU A  100    10.91720  42.32331   4.67805 O_2     1 2 -0.51000
ATOM    188  CB   LEU A  100    14.34171  42.02476   4.11084 C_3     4 0  0.00000
ATOM    189 HCB   LEU A  100    14.68079  42.77440   4.83316 H_      1 0  0.00000
ATOM    190 HCB   LEU A  100    14.03873  42.56153   3.20711 H_      1 0  0.00000
ATOM    191  CG   LEU A  100    15.56944  41.11825   3.76886 C_3     4 0  0.00000
ATOM    192 HCG   LEU A  100    15.24738  40.35434   3.05504 H_      1 0  0.00000
ATOM    193  CD1  LEU A  100    16.68517  41.95209   3.07508 C_3     4 0  0.00000
ATOM    194 HCD1  LEU A  100    17.02840  42.75706   3.72819 H_      1 0  0.00000
ATOM    195 HCD1  LEU A  100    17.53839  41.31915   2.82685 H_      1 0  0.00000
ATOM    196 HCD1  LEU A  100    16.31347  42.38914   2.14803 H_      1 0  0.00000
ATOM    197  CD2  LEU A  100    16.16118  40.39149   5.01042 C_3     4 0  0.00000
ATOM    198 HCD2  LEU A  100    15.43401  39.71197   5.45213 H_      1 0  0.00000
ATOM    199 HCD2  LEU A  100    17.02792  39.79372   4.72456 H_      1 0  0.00000
ATOM    200 HCD2  LEU A  100    16.47028  41.11299   5.76908 H_      1 0  0.00000
ATOM    201  N    HSD A  101    12.40573  43.10702   6.19132 N_R     3 0 -0.47000
ATOM    202 HN    HSD A  101    13.33145  43.07965   6.47783 H___A   1 0  0.31000
ATOM    203  CA   HSD A  101    11.53774  43.98707   6.93345 C_3     4 0  0.16000
ATOM    204 HCA   HSD A  101    10.50433  43.70496   6.72452 H_      1 0  0.00000
ATOM    205  C    HSD A  101    11.74219  45.43817   6.57480 C_R     3 0  0.51000
ATOM    206  O    HSD A  101    12.92578  45.82496   6.40976 O_2     1 2 -0.51000
ATOM    207  CB   HSD A  101    11.78332  43.68765   8.44659 C_3     4 0  0.10000
ATOM    208 HCB   HSD A  101    12.85099  43.75048   8.67592 H_      1 0  0.00000
ATOM    209 HCB   HSD A  101    11.46729  42.66332   8.66274 H_      1 0  0.00000
ATOM    210  CG   HSD A  101    11.05408  44.59651   9.35090 C_R     3 0  0.22000
ATOM    211  ND1  HSD A  101     9.86110  44.38999   9.92986 N_R     2 1 -0.70000
ATOM    212  CD2  HSD A  101    11.46580  45.87189   9.69778 C_R     3 0  0.04000
ATOM    213 HCD2  HSD A  101    12.33699  46.30198   9.41421 H_      1 0  0.00000
ATOM    214  CE1  HSD A  101     9.53693  45.51518  10.59321 C_R     3 0  0.38000
ATOM    215 HCE1  HSD A  101     8.68048  45.65938  11.12752 H_      1 0  0.00000
ATOM    216  NE2  HSD A  101    10.50517  46.42510  10.43843 N_R     3 0 -0.36000
ATOM    217 HNE2  HSD A  101    10.50590  47.31470  10.82177 H___A   1 0  0.32000
ATOM    218  N    PRO A  102    10.73838  46.37221   6.47125 N_R     3 0 -0.29000
ATOM    219  CA   PRO A  102    10.92124  47.74979   6.04641 C_3     4 0  0.11000
ATOM    220 HCA   PRO A  102    11.21636  47.70951   4.99324 H_      1 0  0.00000
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ATOM    221  C    PRO A  102   11.90955  48.56014   6.76814 C_2    3 0  0.51000
ATOM    222  O    PRO A  102   12.70206  49.21987   6.10351 O_2    1 2 -0.51000
ATOM    223  CB   PRO A  102    9.50893  48.39092   6.07401 C_3    4 0  0.00000
ATOM    224 HCB   PRO A  102    9.09910  48.45502   5.06043 H_     1 0  0.00000
ATOM    225 HCB   PRO A  102    9.49137  49.39248   6.51325 H_     1 0  0.00000
ATOM    226  CG   PRO A  102    8.66538  47.41289   6.89556 C_3    4 0  0.00000
ATOM    227 HCG   PRO A  102    7.62067  47.40048   6.57756 H_     1 0  0.00000
ATOM    228 HCG   PRO A  102    8.72097  47.66942   7.95575 H_     1 0  0.00000
ATOM    229  CD   PRO A  102    9.35181  46.06552   6.65936 C_3    4 0  0.18000
ATOM    230 HCD   PRO A  102    9.15577  45.41896   7.51315 H_     1 0  0.00000
ATOM    231 HCD   PRO A  102    8.96751  45.58669   5.75723 H_     1 0  0.00000
ATOM    232  N    ILE A  103   11.99321  48.58942   8.09172 N_R    3 0 -0.47000
ATOM    233 HN    ILE A  103   11.35858  48.06930   8.59910 H___A  1 0  0.31000
ATOM    234  CA   ILE A  103   13.01016  49.30376   8.84033 C_3    4 0  0.16000
ATOM    235 HCA   ILE A  103   12.94524  50.35717   8.54893 H_     1 0  0.00000
ATOM    236  C    ILE A  103   14.35396  48.79555   8.44712 C_R    3 0  0.51000
ATOM    237  O    ILE A  103   15.13049  49.59282   7.89048 O_2    1 2 -0.51000
ATOM    238  CB   ILE A  103   12.78581  49.24901  10.39116 C_3    4 0  0.00000
ATOM    239 HCB   ILE A  103   12.79626  48.19744  10.68717 H_     1 0  0.00000
ATOM    240  CG1  ILE A  103   11.39567  49.81065  10.83374 C_3    4 0  0.00000
ATOM    241 HCG1  ILE A  103   11.26062  49.61869  11.90276 H_     1 0  0.00000
ATOM    242 HCG1  ILE A  103   10.60926  49.26054  10.31471 H_     1 0  0.00000
ATOM    243  CG2  ILE A  103   13.94187  49.90071  11.20632 C_3    4 0  0.00000
ATOM    244 HCG2  ILE A  103   14.05502  50.95183  10.95362 H_     1 0  0.00000
ATOM    245 HCG2  ILE A  103   13.73077  49.81538  12.26833 H_     1 0  0.00000
ATOM    246 HCG2  ILE A  103   14.88976  49.39514  11.02059 H_     1 0  0.00000
ATOM    247  CD1  ILE A  103   11.14298  51.31556  10.58202 C_3    4 0  0.00000
ATOM    248 HCD1  ILE A  103   11.19132  51.54761   9.51997 H_     1 0  0.00000
ATOM    249 HCD1  ILE A  103   10.14647  51.56849  10.93360 H_     1 0  0.00000
ATOM    250 HCD1  ILE A  103   11.86393  51.92981  11.11991 H_     1 0  0.00000
ATOM    251  N    THR A  104   14.71382  47.49834   8.58945 N_R    3 0 -0.47000
ATOM    252 HN    THR A  104   14.10301  46.94605   9.08014 H___A  1 0  0.31000
ATOM    253  CA   THR A  104   15.93862  46.88904   8.12585 C_3    4 0  0.16000
ATOM    254 HCA   THR A  104   16.72590  47.24229   8.79908 H_     1 0  0.00000
ATOM    255  C    THR A  104   16.28165  47.27598   6.72271 C_R    3 0  0.51000
ATOM    256  O    THR A  104   17.43894  47.67538   6.46946 O_2    1 2 -0.51000
ATOM    257  CB   THR A  104   15.88185  45.33260   8.26133 C_3    4 0  0.23000
ATOM    258 HCB   THR A  104   15.18567  44.92713   7.52243 H_     1 0  0.00000
ATOM    259  OG1  THR A  104   15.40989  44.91699   9.54709 O_3    2 2 -0.66000
ATOM    260 HOG1  THR A  104   14.54063  45.34082   9.68107 H___A  1 0  0.43000
ATOM    261  CG2  THR A  104   17.25726  44.64543   8.06246 C_3    4 0  0.00000
ATOM    262 HCG2  THR A  104   17.97514  45.01497   8.79717 H_     1 0  0.00000
ATOM    263 HCG2  THR A  104   17.15629  43.56606   8.18861 H_     1 0  0.00000
ATOM    264 HCG2  THR A  104   17.64553  44.83684   7.06190 H_     1 0  0.00000
ATOM    265  N    LEU A  105   15.36635  47.23495   5.72301 N_R    3 0 -0.47000
ATOM    266 HN    LEU A  105   14.52308  46.83359   5.93724 H___A  1 0  0.31000
ATOM    267  CA   LEU A  105   15.57440  47.73545   4.38288 C_3    4 0  0.16000
ATOM    268 HCA   LEU A  105   16.40090  47.16068   3.95802 H_     1 0  0.00000
ATOM    269  C    LEU A  105   15.95782  49.18326   4.33845 C_R    3 0  0.51000
ATOM    270  O    LEU A  105   17.01664  49.50641   3.74729 O_2    1 2 -0.51000
ATOM    271  CB   LEU A  105   14.31577  47.46306   3.50062 C_3    4 0  0.00000
ATOM    272 HCB   LEU A  105   14.39343  48.02695   2.56396 H_     1 0  0.00000
ATOM    273 HCB   LEU A  105   13.44665  47.86067   4.02637 H_     1 0  0.00000
ATOM    274  CG   LEU A  105   14.07360  45.95413   3.15462 C_3    4 0  0.00000
ATOM    275 HCG   LEU A  105   14.31738  45.34695   4.03084 H_     1 0  0.00000
ATOM    276  CD1  LEU A  105   12.58308  45.67197   2.81914 C_3    4 0  0.00000
ATOM    277 HCD1  LEU A  105   12.24885  46.30904   2.00275 H_     1 0  0.00000
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ATOM    278 HCD1 LEU A 105   12.43872  44.62785   2.53801 H_     1 0  0.00000
ATOM    279 HCD1 LEU A 105   11.95429  45.86823   3.68402 H_     1 0  0.00000
ATOM    280  CD2 LEU A 105   14.98221  45.47861   1.98685 C_3    4 0  0.00000
ATOM    281 HCD2 LEU A 105   16.03319  45.57789   2.25541 H_     1 0  0.00000
ATOM    282 HCD2 LEU A 105   14.79581  44.43046   1.75573 H_     1 0  0.00000
ATOM    283 HCD2 LEU A 105   14.79437  46.06521   1.08603 H_     1 0  0.00000
ATOM    284  N   MET A 106   15.21171  50.14404   4.93595 N_R    3 0 -0.47000
ATOM    285 HN   MET A 106   14.39181  49.86067   5.34606 H___A  1 0  0.31000
ATOM    286  CA  MET A 106   15.55297  51.55093   5.00055 C_3    4 0  0.16000
ATOM    287 HCA  MET A 106   15.59171  51.92248   3.97639 H_     1 0  0.00000
ATOM    288  C   MET A 106   16.87989  51.80406   5.63738 C_R    3 0  0.51000
ATOM    289  O   MET A 106   17.73291  52.54630   5.10308 O_2    1 2 -0.51000
ATOM    290  CB  MET A 106   14.42283  52.31722   5.75200 C_3    4 0  0.00000
ATOM    291 HCB  MET A 106   14.41992  52.00479   6.79844 H_     1 0  0.00000
ATOM    292 HCB  MET A 106   13.45359  52.03178   5.34006 H_     1 0  0.00000
ATOM    293  CG  MET A 106   14.52198  53.86500   5.70453 C_3    4 0  0.04000
ATOM    294 HCG  MET A 106   15.50859  54.19844   6.02655 H_     1 0  0.00000
ATOM    295 HCG  MET A 106   13.80003  54.28194   6.40621 H_     1 0  0.00000
ATOM    296  SD  MET A 106   14.08865  54.53473   4.07983 S_3    2 0 -0.09000
ATOM    297  CE  MET A 106   15.71722  55.10448   3.54820 C_3    4 0  0.05000
ATOM    298 HCE  MET A 106   16.41168  54.27233   3.52104 H_     1 0  0.00000
ATOM    299 HCE  MET A 106   15.65162  55.53633   2.55245 H_     1 0  0.00000
ATOM    300 HCE  MET A 106   16.08553  55.86287   4.23419 H_     1 0  0.00000
ATOM    301  N   GLU A 107   17.17070  51.19550   6.79914 N_R    3 0 -0.47000
ATOM    302 HN   GLU A 107   16.47638  50.65783   7.15872 H___A  1 0  0.31000
ATOM    303  CA  GLU A 107   18.38079  51.23631   7.56145 C_3    4 0  0.16000
ATOM    304 HCA  GLU A 107   18.54481  52.27076   7.87457 H_     1 0  0.00000
ATOM    305  C   GLU A 107   19.53764  50.76833   6.74526 C_R    3 0  0.51000
ATOM    306  O   GLU A 107   20.53236  51.51645   6.60659 O_2    1 2 -0.51000
ATOM    307  CB  GLU A 107   18.08470  50.39261   8.83522 C_3    4 0  0.00000
ATOM    308 HCB  GLU A 107   18.01943  49.33718   8.56227 H_     1 0  0.00000
ATOM    309 HCB  GLU A 107   17.10304  50.69883   9.21463 H_     1 0  0.00000
ATOM    310  CG  GLU A 107   19.07373  50.54179  10.01459 C_3    4 0 -0.10000
ATOM    311 HCG  GLU A 107   19.30119  51.60038  10.16546 H_     1 0  0.00000
ATOM    312 HCG  GLU A 107   20.00511  50.01904   9.78539 H_     1 0  0.00000
ATOM    313  CD  GLU A 107   18.48500  49.97845  11.25181 C_R    3 0  0.62000
ATOM    314  OE1 GLU A 107   18.26140  50.70090  12.24914 O_2    1 2 -0.76000
ATOM    315  OE2 GLU A 107   18.15313  48.77205  11.30729 O_2    1 2 -0.76000
ATOM    316  N   ARG A 108   19.49339  49.60712   6.04532 N_R    3 0 -0.47000
ATOM    317 HN   ARG A 108   18.76132  49.01744   6.20889 H___A  1 0  0.31000
ATOM    318  CA  ARG A 108   20.45247  49.17896   5.06382 C_3    4 0  0.16000
ATOM    319 HCA  ARG A 108   21.39937  49.03903   5.59548 H_     1 0  0.00000
ATOM    320  C   ARG A 108   20.63679  50.17857   3.97110 C_R    3 0  0.51000
ATOM    321  O   ARG A 108   21.80710  50.50974   3.68135 O_2    1 2 -0.51000
ATOM    322  CB  ARG A 108   20.05311  47.79093   4.48704 C_3    4 0  0.00000
ATOM    323 HCB  ARG A 108   19.12545  47.88581   3.91859 H_     1 0  0.00000
ATOM    324 HCB  ARG A 108   19.86321  47.10790   5.32005 H_     1 0  0.00000
ATOM    325  CG  ARG A 108   21.14799  47.14913   3.58610 C_3    4 0  0.00000
ATOM    326 HCG  ARG A 108   22.05446  47.00694   4.18134 H_     1 0  0.00000
ATOM    327 HCG  ARG A 108   21.39573  47.82036   2.75944 H_     1 0  0.00000
ATOM    328  CD  ARG A 108   20.73046  45.78212   2.99638 C_3    4 0  0.38000
ATOM    329 HCD  ARG A 108   20.39948  45.11864   3.80056 H_     1 0  0.00000
ATOM    330 HCD  ARG A 108   21.60073  45.32975   2.51201 H_     1 0  0.00000
ATOM    331  NE  ARG A 108   19.69345  45.93512   2.03039 N_R    3 0 -0.70000
ATOM    332 HNE  ARG A 108   19.38863  46.83441   1.84358 H___A  1 0  0.44000
ATOM    333  CZ  ARG A 108   19.12103  44.94355   1.34997 C_R    3 0  0.64000
ATOM    334  NH1 ARG A 108   19.43043  43.66312   1.49745 N_R    3 0 -0.80000
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ATOM    335 HNH1 ARG A 108   18.98207  42.99124   0.96920 H___A  1 0  0.46000
ATOM    336 HNH1 ARG A 108   20.10990  43.40772   2.13486 H___A  1 0  0.46000
ATOM    337  NH2 ARG A 108   18.18875  45.25274   0.46852 N_R    3 0 -0.80000
ATOM    338 HNH2 ARG A 108   17.75654  44.55713  -0.04039 H___A  1 0  0.46000
ATOM    339 HNH2 ARG A 108   17.94344  46.17925   0.33187 H___A  1 0  0.46000
ATOM    340  N   GLU A 109   19.59860  50.72593   3.28922 N_R    3 0 -0.47000
ATOM    341 HN   GLU A 109   18.72604  50.37706   3.47460 H___A  1 0  0.31000
ATOM    342  CA  GLU A 109   19.71720  51.76530   2.28998 C_3    4 0  0.16000
ATOM    343 HCA  GLU A 109   20.27254  51.32103   1.45672 H_     1 0  0.00000
ATOM    344  C   GLU A 109   20.48681  52.95004   2.79872 C_R    3 0  0.51000
ATOM    345  O   GLU A 109   21.50003  53.34177   2.17344 O_2    1 2 -0.51000
ATOM    346  CB  GLU A 109   18.30777  52.14600   1.73069 C_3    4 0  0.00000
ATOM    347 HCB  GLU A 109   17.74037  52.65943   2.50346 H_     1 0  0.00000
ATOM    348 HCB  GLU A 109   17.76849  51.22685   1.48193 H_     1 0  0.00000
ATOM    349  CG  GLU A 109   18.35178  53.03373   0.45326 C_3    4 0 -0.10000
ATOM    350 HCG  GLU A 109   18.90173  52.49127  -0.31929 H_     1 0  0.00000
ATOM    351 HCG  GLU A 109   18.90407  53.94696   0.67919 H_     1 0  0.00000
ATOM    352  CD  GLU A 109   17.04922  53.43520  -0.12839 C_R    3 0  0.62000
ATOM    353  OE1 GLU A 109   15.92689  53.21102   0.37803 O_2    1 2 -0.76000
ATOM    354  OE2 GLU A 109   17.01384  54.07119  -1.20224 O_2    1 2 -0.76000
ATOM    355  N   LEU A 110   20.16513  53.55032   3.96971 N_R    3 0 -0.47000
ATOM    356 HN   LEU A 110   19.36831  53.22866   4.39070 H___A  1 0  0.31000
ATOM    357  CA  LEU A 110   20.90791  54.60438   4.62314 C_3    4 0  0.16000
ATOM    358 HCA  LEU A 110   20.88153  55.47468   3.96725 H_     1 0  0.00000
ATOM    359  C   LEU A 110   22.33684  54.25631   4.86795 C_R    3 0  0.51000
ATOM    360  O   LEU A 110   23.25071  55.02345   4.47632 O_2    1 2 -0.51000
ATOM    361  CB  LEU A 110   20.23787  54.98659   5.98029 C_3    4 0  0.00000
ATOM    362 HCB  LEU A 110   20.91129  55.64104   6.54187 H_     1 0  0.00000
ATOM    363 HCB  LEU A 110   20.12411  54.07256   6.56871 H_     1 0  0.00000
ATOM    364  CG  LEU A 110   18.85104  55.69493   5.87183 C_3    4 0  0.00000
ATOM    365 HCG  LEU A 110   18.25129  55.15587   5.13784 H_     1 0  0.00000
ATOM    366  CD1 LEU A 110   18.07812  55.63913   7.22033 C_3    4 0  0.00000
ATOM    367 HCD1 LEU A 110   18.64216  56.13307   8.01131 H_     1 0  0.00000
ATOM    368 HCD1 LEU A 110   17.10860  56.12794   7.12785 H_     1 0  0.00000
ATOM    369 HCD1 LEU A 110   17.90079  54.60503   7.51391 H_     1 0  0.00000
ATOM    370  CD2 LEU A 110   18.98206  57.16318   5.38483 C_3    4 0  0.00000
ATOM    371 HCD2 LEU A 110   19.42571  57.20135   4.39075 H_     1 0  0.00000
ATOM    372 HCD2 LEU A 110   18.00301  57.63355   5.32293 H_     1 0  0.00000
ATOM    373 HCD2 LEU A 110   19.60215  57.74507   6.06886 H_     1 0  0.00000
ATOM    374  N   VAL A 111   22.66375  53.11023   5.50638 N_R    3 0 -0.47000
ATOM    375 HN   VAL A 111   21.94466  52.57829   5.84585 H___A  1 0  0.31000
ATOM    376  CA  VAL A 111   24.00097  52.62769   5.72182 C_3    4 0  0.16000
ATOM    377 HCA  VAL A 111   24.51439  53.37638   6.33936 H_     1 0  0.00000
ATOM    378  C   VAL A 111   24.74826  52.52149   4.42876 C_R    3 0  0.51000
ATOM    379  O   VAL A 111   25.87854  53.04511   4.36346 O_2    1 2 -0.51000
ATOM    380  CB  VAL A 111   23.95427  51.30200   6.55856 C_3    4 0  0.00000
ATOM    381 HCB  VAL A 111   23.21289  50.63843   6.10596 H_     1 0  0.00000
ATOM    382  CG1 VAL A 111   25.29703  50.52282   6.56698 C_3    4 0  0.00000
ATOM    383 HCG1 VAL A 111   26.10270  51.15663   6.93721 H_     1 0  0.00000
ATOM    384 HCG1 VAL A 111   25.22641  49.63231   7.19325 H_     1 0  0.00000
ATOM    385 HCG1 VAL A 111   25.53913  50.19554   5.55801 H_     1 0  0.00000
ATOM    386  CG2 VAL A 111   23.51568  51.57280   8.02935 C_3    4 0  0.00000
ATOM    387 HCG2 VAL A 111   22.55416  52.08219   8.06497 H_     1 0  0.00000
ATOM    388 HCG2 VAL A 111   23.41709  50.63476   8.57721 H_     1 0  0.00000
ATOM    389 HCG2 VAL A 111   24.24876  52.19922   8.54110 H_     1 0  0.00000
ATOM    390  N   GLU A 112   24.24706  51.92628   3.32302 N_R    3 0 -0.47000
ATOM    391 HN   GLU A 112   23.40959  51.48355   3.42329 H___A  1 0  0.31000
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ATOM    392  CA   GLU A  112   24.86087  51.90554   2.01628 C_3    4 0  0.16000
ATOM    393 HCA   GLU A  112   25.83676  51.43572   2.12842 H_     1 0  0.00000
ATOM    394  C    GLU A  112   25.10128  53.27000   1.45253 C_R    3 0  0.51000
ATOM    395  O    GLU A  112   26.23966  53.55133   1.00085 O_2    1 2 -0.51000
ATOM    396  CB   GLU A  112   24.04540  50.98661   1.05759 C_3    4 0  0.00000
ATOM    397 HCB   GLU A  112   24.34056  51.16991   0.01911 H_     1 0  0.00000
ATOM    398 HCB   GLU A  112   22.98562  51.24285   1.13526 H_     1 0  0.00000
ATOM    399  CG   GLU A  112   24.21567  49.46802   1.36436 C_3    4 0 -0.10000
ATOM    400 HCG   GLU A  112   23.40254  48.91212   0.89159 H_     1 0  0.00000
ATOM    401 HCG   GLU A  112   24.13352  49.29521   2.44049 H_     1 0  0.00000
ATOM    402  CD   GLU A  112   25.49870  48.92012   0.87565 C_R    3 0  0.62000
ATOM    403  OE1  GLU A  112   25.63065  48.55231  -0.31139 O_2    1 2 -0.76000
ATOM    404  OE2  GLU A  112   26.47830  48.77705   1.64134 O_2    1 2 -0.76000
ATOM    405  N    ILE A  113   24.15471  54.24006   1.48541 N_R    3 0 -0.47000
ATOM    406 HN    ILE A  113   23.27519  53.97288   1.75347 H___A  1 0  0.31000
ATOM    407  CA   ILE A  113   24.38110  55.62753   1.14033 C_3    4 0  0.16000
ATOM    408 HCA   ILE A  113   24.63748  55.64737   0.07582 H_     1 0  0.00000
ATOM    409  C    ILE A  113   25.54741  56.18590   1.89640 C_R    3 0  0.51000
ATOM    410  O    ILE A  113   26.48137  56.72553   1.26244 O_2    1 2 -0.51000
ATOM    411  CB   ILE A  113   23.07014  56.48549   1.30125 C_3    4 0  0.00000
ATOM    412 HCB   ILE A  113   22.66734  56.29729   2.29916 H_     1 0  0.00000
ATOM    413  CG1  ILE A  113   21.98471  56.05376   0.25599 C_3    4 0  0.00000
ATOM    414 HCG1  ILE A  113   21.93225  54.96395   0.20655 H_     1 0  0.00000
ATOM    415 HCG1  ILE A  113   22.28790  56.38985  -0.73806 H_     1 0  0.00000
ATOM    416  CG2  ILE A  113   23.34176  58.02164   1.20693 C_3    4 0  0.00000
ATOM    417 HCG2  ILE A  113   23.78536  58.27129   0.24246 H_     1 0  0.00000
ATOM    418 HCG2  ILE A  113   22.42386  58.59160   1.32823 H_     1 0  0.00000
ATOM    419 HCG2  ILE A  113   24.01705  58.34779   1.99742 H_     1 0  0.00000
ATOM    420  CD1  ILE A  113   20.54575  56.55629   0.53865 C_3    4 0  0.00000
ATOM    421 HCD1  ILE A  113   20.49238  57.64241   0.51425 H_     1 0  0.00000
ATOM    422 HCD1  ILE A  113   19.86971  56.17167  -0.22474 H_     1 0  0.00000
ATOM    423 HCD1  ILE A  113   20.20747  56.20539   1.51333 H_     1 0  0.00000
ATOM    424  N    PHE A  114   25.64188  56.12804   3.24457 N_R    3 0 -0.47000
ATOM    425 HN    PHE A  114   24.89667  55.73504   3.70470 H___A  1 0  0.31000
ATOM    426  CA   PHE A  114   26.76048  56.65046   4.00003 C_3    4 0  0.16000
ATOM    427 HCA   PHE A  114   26.97687  57.63205   3.56976 H_     1 0  0.00000
ATOM    428  C    PHE A  114   28.05144  55.89733   3.84049 C_R    3 0  0.51000
ATOM    429  O    PHE A  114   29.14446  56.51516   3.84460 O_2    1 2 -0.51000
ATOM    430  CB   PHE A  114   26.31541  56.90438   5.47039 C_3    4 0  0.00000
ATOM    431 HCB   PHE A  114   27.17519  57.13872   6.08933 H_     1 0  0.00000
ATOM    432 HCB   PHE A  114   25.87126  55.98902   5.87233 H_     1 0  0.00000
ATOM    433  CG   PHE A  114   25.38690  58.06470   5.59494 C_R    3 0  0.00000
ATOM    434  CD1  PHE A  114   25.83748  59.36989   5.27229 C_R    3 0  0.00000
ATOM    435 HCD1  PHE A  114   26.80231  59.52763   4.97606 H_     1 0  0.00000
ATOM    436  CD2  PHE A  114   24.05184  57.90245   6.03242 C_R    3 0  0.00000
ATOM    437 HCD2  PHE A  114   23.69833  56.97782   6.28239 H_     1 0  0.00000
ATOM    438  CE1  PHE A  114   24.97278  60.47401   5.34666 C_R    3 0  0.00000
ATOM    439 HCE1  PHE A  114   25.30763  61.40754   5.09611 H_     1 0  0.00000
ATOM    440  CE2  PHE A  114   23.19037  59.01099   6.13208 C_R    3 0  0.00000
ATOM    441 HCE2  PHE A  114   22.22818  58.88592   6.45461 H_     1 0  0.00000
ATOM    442  CZ   PHE A  114   23.65263  60.29303   5.78694 C_R    3 0  0.00000
ATOM    443 HCZ   PHE A  114   23.03695  61.10032   5.86896 H_     1 0  0.00000
ATOM    444  N    ARG A  115   28.11730  54.57112   3.58784 N_R    3 0 -0.47000
ATOM    445 HN    ARG A  115   27.32984  54.06801   3.76467 H___A  1 0  0.31000
ATOM    446  CA   ARG A  115   29.26508  53.85746   3.07966 C_3    4 0  0.16000
ATOM    447 HCA   ARG A  115   30.07088  53.94797   3.81507 H_     1 0  0.00000
ATOM    448  C    ARG A  115   29.72417  54.44129   1.78678 C_R    3 0  0.51000
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ATOM    449  O   ARG A 115   30.94724  54.66075   1.63335 O_2    1 2 -0.51000
ATOM    450  CB  ARG A 115   28.97315  52.34393   2.88895 C_3    4 0  0.00000
ATOM    451 HCB  ARG A 115   29.77564  51.88945   2.29883 H_     1 0  0.00000
ATOM    452 HCB  ARG A 115   28.05640  52.24251   2.31031 H_     1 0  0.00000
ATOM    453  CG  ARG A 115   28.85677  51.52403   4.20693 C_3    4 0  0.00000
ATOM    454 HCG  ARG A 115   28.25941  52.06902   4.94121 H_     1 0  0.00000
ATOM    455 HCG  ARG A 115   29.85647  51.38370   4.62792 H_     1 0  0.00000
ATOM    456  CD  ARG A 115   28.20548  50.14270   3.94897 C_3    4 0  0.38000
ATOM    457 HCD  ARG A 115   28.75040  49.62239   3.15624 H_     1 0  0.00000
ATOM    458 HCD  ARG A 115   27.17914  50.30973   3.62527 H_     1 0  0.00000
ATOM    459  NE  ARG A 115   28.17928  49.31853   5.11110 N_R    3 0 -0.70000
ATOM    460 HNE  ARG A 115   28.63387  49.63514   5.89911 H___A  1 0  0.44000
ATOM    461  CZ  ARG A 115   27.55915  48.13664   5.17901 C_R    3 0  0.64000
ATOM    462  NH1 ARG A 115   26.88563  47.57527   4.18411 N_R    3 0 -0.80000
ATOM    463 HNH1 ARG A 115   26.46506  46.71846   4.30312 H___A  1 0  0.46000
ATOM    464 HNH1 ARG A 115   26.79558  48.01804   3.33607 H___A  1 0  0.46000
ATOM    465  NH2 ARG A 115   27.59109  47.46987   6.32024 N_R    3 0 -0.80000
ATOM    466 HNH2 ARG A 115   27.13815  46.61952   6.39108 H___A  1 0  0.46000
ATOM    467 HNH2 ARG A 115   28.05349  47.83582   7.08421 H___A  1 0  0.46000
ATOM    468  N   ALA A 116   28.86339  54.78844   0.79889 N_R    3 0 -0.47000
ATOM    469 HN   ALA A 116   27.95933  54.47264   0.87637 H___A  1 0  0.31000
ATOM    470  CA  ALA A 116   29.23048  55.56746  -0.36045 C_3    4 0  0.16000
ATOM    471 HCA  ALA A 116   30.03992  55.01790  -0.85475 H_     1 0  0.00000
ATOM    472  C   ALA A 116   29.77176  56.93713  -0.06510 C_R    3 0  0.51000
ATOM    473  O   ALA A 116   30.25099  57.58456  -1.02651 O_2    1 2 -0.51000
ATOM    474  CB  ALA A 116   28.06580  55.60240  -1.38665 C_3    4 0  0.00000
ATOM    475 HCB  ALA A 116   27.19063  56.10332  -0.98501 H_     1 0  0.00000
ATOM    476 HCB  ALA A 116   28.36836  56.12962  -2.29288 H_     1 0  0.00000
ATOM    477 HCB  ALA A 116   27.78359  54.58615  -1.66586 H_     1 0  0.00000
ATOM    478  N   LEU A 117   29.85237  57.47065   1.18552 N_R    3 0 -0.47000
ATOM    479 HN   LEU A 117   29.47193  57.00070   1.92842 H___A  1 0  0.31000
ATOM    480  CA  LEU A 117   30.56863  58.66301   1.57283 C_3    4 0  0.16000
ATOM    481 HCA  LEU A 117   31.02125  59.15657   0.70974 H_     1 0  0.00000
ATOM    482  C   LEU A 117   31.71094  58.31077   2.47792 C_R    3 0  0.51000
ATOM    483  O   LEU A 117   32.40848  59.22163   2.98966 O_2    1 2 -0.51000
ATOM    484  CB  LEU A 117   29.59973  59.68193   2.25928 C_3    4 0  0.00000
ATOM    485 HCB  LEU A 117   30.21144  60.37872   2.83960 H_     1 0  0.00000
ATOM    486 HCB  LEU A 117   28.95979  59.16217   2.97852 H_     1 0  0.00000
ATOM    487  CG  LEU A 117   28.71797  60.55325   1.30429 C_3    4 0  0.00000
ATOM    488 HCG  LEU A 117   29.32148  60.83691   0.43764 H_     1 0  0.00000
ATOM    489  CD1 LEU A 117   27.46273  59.80558   0.77947 C_3    4 0  0.00000
ATOM    490 HCD1 LEU A 117   26.82320  59.49720   1.60882 H_     1 0  0.00000
ATOM    491 HCD1 LEU A 117   26.88329  60.45228   0.11846 H_     1 0  0.00000
ATOM    492 HCD1 LEU A 117   27.75057  58.92590   0.20764 H_     1 0  0.00000
ATOM    493  CD2 LEU A 117   28.29267  61.87444   2.00434 C_3    4 0  0.00000
ATOM    494 HCD2 LEU A 117   29.17142  62.45610   2.29139 H_     1 0  0.00000
ATOM    495 HCD2 LEU A 117   27.70379  62.48641   1.32558 H_     1 0  0.00000
ATOM    496 HCD2 LEU A 117   27.70055  61.66845   2.89902 H_     1 0  0.00000
ATOM    497  N   GLY A 118   32.05826  57.02923   2.74719 N_R    3 0 -0.47000
ATOM    498 HN   GLY A 118   31.58135  56.31796   2.32705 H___A  1 0  0.31000
ATOM    499  CA  GLY A 118   33.11171  56.59387   3.60131 C_3    4 0  0.16000
ATOM    500 HCA  GLY A 118   34.02036  57.15864   3.37669 H_     1 0  0.00000
ATOM    501 HCA  GLY A 118   33.31763  55.55345   3.34251 H_     1 0  0.00000
ATOM    502  C   GLY A 118   32.81423  56.62521   5.05190 C_R    3 0  0.51000
ATOM    503  O   GLY A 118   33.77897  56.84965   5.82255 O_2    1 2 -0.51000
ATOM    504  N   TYR A 119   31.57509  56.38440   5.55092 N_R    3 0 -0.47000
ATOM    505 HN   TYR A 119   30.83412  56.33375   4.93599 H___A  1 0  0.31000
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ATOM    506  CA   TYR A  119   31.26580  56.20491   6.95058 C_3    4 0  0.16000
ATOM    507 HCA   TYR A  119   31.95488  56.77615   7.56934 H_     1 0  0.00000
ATOM    508  C    TYR A  119   31.35641  54.76629   7.34073 C_R    3 0  0.51000
ATOM    509  O    TYR A  119   30.74765  53.91466   6.64793 O_2    1 2 -0.51000
ATOM    510  CB   TYR A  119   29.83862  56.71944   7.28400 C_3    4 0  0.00000
ATOM    511 HCB   TYR A  119   29.57430  56.34867   8.27776 H_     1 0  0.00000
ATOM    512 HCB   TYR A  119   29.14751  56.24434   6.59226 H_     1 0  0.00000
ATOM    513  CG   TYR A  119   29.61614  58.19712   7.24922 C_R    3 0  0.00000
ATOM    514  CD1  TYR A  119   29.79702  58.95323   6.06564 C_R    3 0  0.00000
ATOM    515 HCD1  TYR A  119   30.15678  58.51708   5.21705 H_     1 0  0.00000
ATOM    516  CD2  TYR A  119   29.14626  58.87540   8.40161 C_R    3 0  0.00000
ATOM    517 HCD2  TYR A  119   29.02278  58.37630   9.28362 H_     1 0  0.00000
ATOM    518  CE1  TYR A  119   29.47117  60.32194   6.02257 C_R    3 0  0.00000
ATOM    519 HCE1  TYR A  119   29.59963  60.84967   5.15778 H_     1 0  0.00000
ATOM    520  CE2  TYR A  119   28.81111  60.24147   8.35733 C_R    3 0  0.00000
ATOM    521 HCE2  TYR A  119   28.44875  60.70159   9.19456 H_     1 0  0.00000
ATOM    522  CZ   TYR A  119   28.95433  60.96224   7.15929 C_R    3 0  0.11000
ATOM    523  OH   TYR A  119   28.59067  62.26110   7.08605 O_R    2 2 -0.54000
ATOM    524 HOH   TYR A  119   28.66332  62.74587   6.24184 H___A  1 0  0.43000
ATOM    525  N    GLN A  120   32.01909  54.38065   8.46218 N_R    3 0 -0.47000
ATOM    526 HN    GLN A  120   32.45311  55.07990   8.96683 H___A  1 0  0.31000
ATOM    527  CA   GLN A  120   32.05561  53.01783   8.95906 C_3    4 0  0.16000
ATOM    528 HCA   GLN A  120   32.04921  52.33580   8.10106 H_     1 0  0.00000
ATOM    529  C    GLN A  120   30.89469  52.69450   9.80201 C_2    3 0  0.51000
ATOM    530  O    GLN A  120   30.53396  53.47979  10.66773 O_2    1 2 -0.51000
ATOM    531  CB   GLN A  120   33.38389  52.71069   9.70728 C_3    4 0  0.00000
ATOM    532 HCB   GLN A  120   33.35629  51.67049  10.04817 H_     1 0  0.00000
ATOM    533 HCB   GLN A  120   33.45827  53.34188  10.58899 H_     1 0  0.00000
ATOM    534  CG   GLN A  120   34.65924  52.91793   8.84540 C_3    4 0  0.00000
ATOM    535 HCG   GLN A  120   34.73962  53.97504   8.57758 H_     1 0  0.00000
ATOM    536 HCG   GLN A  120   34.58019  52.34388   7.91914 H_     1 0  0.00000
ATOM    537  CD   GLN A  120   35.88734  52.49784   9.55190 C_R    3 0  0.55000
ATOM    538  OE1  GLN A  120   36.75572  53.32407   9.90240 O_2    1 2 -0.55000
ATOM    539  NE2  GLN A  120   36.13491  51.21269   9.83507 N_R    3 0 -0.60000
ATOM    540 HNE2  GLN A  120   36.95445  50.98314  10.29723 H___A  1 0  0.30000
ATOM    541 HNE2  GLN A  120   35.50533  50.52354   9.58103 H___A  1 0  0.30000
ATOM    542  N    ALA A  121   30.23830  51.55436   9.65300 N_R    3 0 -0.47000
ATOM    543 HN    ALA A  121   30.60117  50.92684   9.01229 H___A  1 0  0.31000
ATOM    544  CA   ALA A  121   29.04083  51.14984  10.35334 C_3    4 0  0.16000
ATOM    545 HCA   ALA A  121   28.43964  52.03239  10.55541 H_     1 0  0.00000
ATOM    546  C    ALA A  121   29.31170  50.45395  11.64327 C_R    3 0  0.51000
ATOM    547  O    ALA A  121   29.98253  49.39516  11.60885 O_2    1 2 -0.51000
ATOM    548  CB   ALA A  121   28.18941  50.26954   9.40716 C_3    4 0  0.00000
ATOM    549 HCB   ALA A  121   28.73332  49.36695   9.12171 H_     1 0  0.00000
ATOM    550 HCB   ALA A  121   27.25472  49.98053   9.89257 H_     1 0  0.00000
ATOM    551 HCB   ALA A  121   27.94840  50.82786   8.50154 H_     1 0  0.00000
ATOM    552  N    VAL A  122   28.86268  50.96168  12.82172 N_R    3 0 -0.47000
ATOM    553 HN    VAL A  122   28.37920  51.78868  12.75234 H___A  1 0  0.31000
ATOM    554  CA   VAL A  122   29.11182  50.41114  14.14175 C_3    4 0  0.16000
ATOM    555 HCA   VAL A  122   29.33084  49.34310  14.03704 H_     1 0  0.00000
ATOM    556  C    VAL A  122   27.92059  50.48428  15.04952 C_R    3 0  0.51000
ATOM    557  O    VAL A  122   27.38425  51.59131  15.26649 O_2    1 2 -0.51000
ATOM    558  CB   VAL A  122   30.37910  51.07189  14.79848 C_3    4 0  0.00000
ATOM    559 HCB   VAL A  122   30.44427  50.71545  15.83338 H_     1 0  0.00000
ATOM    560  CG1  VAL A  122   31.69968  50.61998  14.11008 C_3    4 0  0.00000
ATOM    561 HCG1  VAL A  122   31.73787  50.96095  13.07513 H_     1 0  0.00000
ATOM    562 HCG1  VAL A  122   32.56352  51.02936  14.63510 H_     1 0  0.00000
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ATOM    563 HCG1 VAL A 122   31.78428  49.53217  14.12624 H_     1 0  0.00000
ATOM    564  CG2 VAL A 122   30.32556  52.62516  14.85578 C_3    4 0  0.00000
ATOM    565 HCG2 VAL A 122   29.50154  52.96388  15.47931 H_     1 0  0.00000
ATOM    566 HCG2 VAL A 122   31.24243  53.02530  15.28646 H_     1 0  0.00000
ATOM    567 HCG2 VAL A 122   30.20466  53.04036  13.85602 H_     1 0  0.00000
ATOM    568  N   GLU A 123   27.43691  49.38434  15.68097 N_R    3 0 -0.47000
ATOM    569 HN   GLU A 123   27.89758  48.55157  15.50764 H___A  1 0  0.31000
ATOM    570  CA  GLU A 123   26.32112  49.31931  16.60409 C_3    4 0  0.16000
ATOM    571 HCA  GLU A 123   25.59812  50.10664  16.36905 H_     1 0  0.00000
ATOM    572  C   GLU A 123   26.71381  49.48289  18.04060 C_R    3 0  0.51000
ATOM    573  O   GLU A 123   27.92573  49.53047  18.35588 O_2    1 2 -0.51000
ATOM    574  CB  GLU A 123   25.61731  47.94059  16.41676 C_3    4 0  0.00000
ATOM    575 HCB  GLU A 123   24.84510  47.81340  17.18275 H_     1 0  0.00000
ATOM    576 HCB  GLU A 123   26.35760  47.14664  16.56234 H_     1 0  0.00000
ATOM    577  CG  GLU A 123   24.93569  47.76034  15.03378 C_3    4 0 -0.10000
ATOM    578 HCG  GLU A 123   25.64629  47.99920  14.23848 H_     1 0  0.00000
ATOM    579 HCG  GLU A 123   24.09646  48.45484  14.95374 H_     1 0  0.00000
ATOM    580  CD  GLU A 123   24.43190  46.38517  14.84226 C_R    3 0  0.62000
ATOM    581  OE1 GLU A 123   23.56022  45.90979  15.60431 O_2    1 2 -0.76000
ATOM    582  OE2 GLU A 123   24.87628  45.66092  13.92227 O_2    1 2 -0.76000
ATOM    583  N   GLY A 124   25.76460  49.56330  19.01261 N_R    3 0 -0.47000
ATOM    584 HN   GLY A 124   24.84209  49.52792  18.71601 H___A  1 0  0.31000
ATOM    585  CA  GLY A 124   25.99558  49.70180  20.43035 C_3    4 0  0.16000
ATOM    586 HCA  GLY A 124   25.93535  50.76744  20.65631 H_     1 0  0.00000
ATOM    587 HCA  GLY A 124   26.99955  49.35540  20.68293 H_     1 0  0.00000
ATOM    588  C   GLY A 124   25.02818  48.98804  21.32397 C_R    3 0  0.51000
ATOM    589  O   GLY A 124   24.10433  48.33859  20.77056 O_2    1 2 -0.51000
ATOM    590  N   PRO A 125   25.09080  49.02708  22.69845 N_R    3 0 -0.29000
ATOM    591  CA  PRO A 125   24.18220  48.33798  23.59996 C_3    4 0  0.11000
ATOM    592 HCA  PRO A 125   23.97033  47.33329  23.21687 H_     1 0  0.00000
ATOM    593  C   PRO A 125   22.91826  49.03144  23.88979 C_2    3 0  0.51000
ATOM    594  O   PRO A 125   22.91420  50.25153  24.01837 O_2    1 2 -0.51000
ATOM    595  CB  PRO A 125   25.02107  48.18421  24.89073 C_3    4 0  0.00000
ATOM    596 HCB  PRO A 125   25.65832  47.29721  24.81805 H_     1 0  0.00000
ATOM    597 HCB  PRO A 125   24.41568  48.09809  25.79706 H_     1 0  0.00000
ATOM    598  CG  PRO A 125   25.89647  49.44305  24.90939 C_3    4 0  0.00000
ATOM    599 HCG  PRO A 125   26.83756  49.26248  25.43382 H_     1 0  0.00000
ATOM    600 HCG  PRO A 125   25.36701  50.26883  25.39460 H_     1 0  0.00000
ATOM    601  CD  PRO A 125   26.11360  49.74164  23.41375 C_3    4 0  0.18000
ATOM    602 HCD  PRO A 125   26.04956  50.81710  23.22626 H_     1 0  0.00000
ATOM    603 HCD  PRO A 125   27.10313  49.38175  23.11791 H_     1 0  0.00000
ATOM    604  N   GLU A 126   21.79169  48.34396  24.00845 N_R    3 0 -0.47000
ATOM    605 HN   GLU A 126   21.86682  47.38060  23.92384 H___A  1 0  0.31000
ATOM    606  CA  GLU A 126   20.46705  48.86961  24.25833 C_3    4 0  0.16000
ATOM    607 HCA  GLU A 126   20.32318  49.73961  23.61501 H_     1 0  0.00000
ATOM    608  C   GLU A 126   20.25456  49.29351  25.66907 C_R    3 0  0.51000
ATOM    609  O   GLU A 126   19.86495  50.45981  25.92959 O_2    1 2 -0.51000
ATOM    610  CB  GLU A 126   19.38557  47.82705  23.84840 C_3    4 0  0.00000
ATOM    611 HCB  GLU A 126   18.40132  48.24979  24.07685 H_     1 0  0.00000
ATOM    612 HCB  GLU A 126   19.49809  46.91390  24.44179 H_     1 0  0.00000
ATOM    613  CG  GLU A 126   19.44197  47.45738  22.34179 C_3    4 0 -0.10000
ATOM    614 HCG  GLU A 126   20.25350  46.74985  22.15721 H_     1 0  0.00000
ATOM    615 HCG  GLU A 126   19.65131  48.35546  21.76090 H_     1 0  0.00000
ATOM    616  CD  GLU A 126   18.17938  46.88251  21.85582 C_R    3 0  0.62000
ATOM    617  OE1 GLU A 126   17.79536  45.73279  22.15466 O_2    1 2 -0.76000
ATOM    618  OE2 GLU A 126   17.43780  47.53075  21.09294 O_2    1 2 -0.76000
ATOM    619  N   VAL A 127   20.49719  48.41799  26.67238 N_R    3 0 -0.47000
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ATOM    620 HN   VAL A 127   20.71813  47.51002  26.42640 H___A  1 0  0.31000
ATOM    621  CA  VAL A 127   20.58987  48.76884  28.06266 C_3    4 0  0.16000
ATOM    622 HCA  VAL A 127   19.70880  49.36099  28.33425 H_     1 0  0.00000
ATOM    623  C   VAL A 127   21.82425  49.58797  28.21174 C_R    3 0  0.51000
ATOM    624  O   VAL A 127   22.91605  49.10686  27.82735 O_2    1 2 -0.51000
ATOM    625  CB  VAL A 127   20.61732  47.50854  28.99232 C_3    4 0  0.00000
ATOM    626 HCB  VAL A 127   21.51339  46.92564  28.75583 H_     1 0  0.00000
ATOM    627  CG1 VAL A 127   20.69658  47.90124  30.49866 C_3    4 0  0.00000
ATOM    628 HCG1 VAL A 127   19.84894  48.52753  30.77931 H_     1 0  0.00000
ATOM    629 HCG1 VAL A 127   20.69218  47.01152  31.12828 H_     1 0  0.00000
ATOM    630 HCG1 VAL A 127   21.61528  48.45081  30.70761 H_     1 0  0.00000
ATOM    631  CG2 VAL A 127   19.39595  46.57693  28.75418 C_3    4 0  0.00000
ATOM    632 HCG2 VAL A 127   19.37623  46.22195  27.72255 H_     1 0  0.00000
ATOM    633 HCG2 VAL A 127   19.45087  45.70268  29.40509 H_     1 0  0.00000
ATOM    634 HCG2 VAL A 127   18.46446  47.10500  28.95794 H_     1 0  0.00000
ATOM    635  N   GLU A 128   21.74966  50.84432  28.69103 N_R    3 0 -0.47000
ATOM    636 HN   GLU A 128   20.89015  51.15007  28.97257 H___A  1 0  0.31000
ATOM    637  CA  GLU A 128   22.83013  51.77900  28.82015 C_3    4 0  0.16000
ATOM    638 HCA  GLU A 128   23.78395  51.26572  28.68675 H_     1 0  0.00000
ATOM    639  C   GLU A 128   22.83057  52.38210  30.18254 C_R    3 0  0.51000
ATOM    640  O   GLU A 128   21.87619  52.17707  30.97001 O_2    1 2 -0.51000
ATOM    641  CB  GLU A 128   22.65872  52.81416  27.66401 C_3    4 0  0.00000
ATOM    642 HCB  GLU A 128   21.67297  53.28112  27.76086 H_     1 0  0.00000
ATOM    643 HCB  GLU A 128   22.66205  52.26438  26.71710 H_     1 0  0.00000
ATOM    644  CG  GLU A 128   23.70112  53.95828  27.53008 C_3    4 0 -0.10000
ATOM    645 HCG  GLU A 128   23.61584  54.63333  28.37790 H_     1 0  0.00000
ATOM    646 HCG  GLU A 128   23.43428  54.54339  26.64541 H_     1 0  0.00000
ATOM    647  CD  GLU A 128   25.10518  53.51973  27.40572 C_R    3 0  0.62000
ATOM    648  OE1 GLU A 128   25.76250  53.74233  26.36715 O_2    1 2 -0.76000
ATOM    649  OE2 GLU A 128   25.72317  52.97945  28.35140 O_2    1 2 -0.76000
ATOM    650  N   SER A 129   23.87149  53.15117  30.57288 N_R    3 0 -0.47000
ATOM    651 HN   SER A 129   24.58144  53.19641  29.92591 H___A  1 0  0.31000
ATOM    652  CA  SER A 129   23.94216  53.91806  31.79030 C_3    4 0  0.16000
ATOM    653 HCA  SER A 129   23.23978  53.51524  32.52575 H_     1 0  0.00000
ATOM    654  C   SER A 129   23.59854  55.33198  31.52298 C_R    3 0  0.51000
ATOM    655  O   SER A 129   24.07290  55.93332  30.52668 O_2    1 2 -0.51000
ATOM    656  CB  SER A 129   25.32931  53.89879  32.48855 C_3    4 0  0.23000
ATOM    657 HCB  SER A 129   26.11428  54.19236  31.78763 H_     1 0  0.00000
ATOM    658 HCB  SER A 129   25.55335  52.90324  32.86246 H_     1 0  0.00000
ATOM    659  OG  SER A 129   25.35343  54.78335  33.61642 O_3    2 2 -0.66000
ATOM    660 HOG  SER A 129   24.79617  54.34400  34.29535 H___A  1 0  0.43000
ATOM    661  N   GLU A 130   22.90428  56.00869  32.46458 N_R    3 0 -0.47000
ATOM    662 HN   GLU A 130   22.45163  55.48610  33.13224 H___A  1 0  0.31000
ATOM    663  CA  GLU A 130   22.81014  57.43702  32.56797 C_3    4 0  0.16000
ATOM    664 HCA  GLU A 130   22.12807  57.77054  31.77910 H_     1 0  0.00000
ATOM    665  C   GLU A 130   24.11738  58.14273  32.40160 C_R    3 0  0.51000
ATOM    666  O   GLU A 130   24.12812  59.26094  31.82436 O_2    1 2 -0.51000
ATOM    667  CB  GLU A 130   22.15281  57.74504  33.93999 C_3    4 0  0.00000
ATOM    668 HCB  GLU A 130   22.72316  57.26084  34.73984 H_     1 0  0.00000
ATOM    669 HCB  GLU A 130   21.15340  57.30039  33.92827 H_     1 0  0.00000
ATOM    670  CG  GLU A 130   22.02904  59.25340  34.27006 C_3    4 0 -0.10000
ATOM    671 HCG  GLU A 130   21.75396  59.79983  33.37176 H_     1 0  0.00000
ATOM    672 HCG  GLU A 130   22.99306  59.63709  34.60843 H_     1 0  0.00000
ATOM    673  CD  GLU A 130   21.03589  59.50181  35.32135 C_R    3 0  0.62000
ATOM    674  OE1 GLU A 130   21.17784  59.01985  36.46204 O_2    1 2 -0.76000
ATOM    675  OE2 GLU A 130   20.00854  60.18311  35.11718 O_2    1 2 -0.76000
ATOM    676  N   PHE A 131   25.28706  57.54157  32.74797 N_R    3 0 -0.47000
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ATOM     677 HN    PHE A  131   25.25649  56.65252  33.10427 H___A  1 0  0.31000
ATOM     678  CA   PHE A  131   26.58878  58.09993  32.53820 C_3    4 0  0.16000
ATOM     679 HCA   PHE A  131   26.60961  59.01770  33.12066 H_     1 0  0.00000
ATOM     680  C    PHE A  131   26.84424  58.41191  31.10319 C_R    3 0  0.51000
ATOM     681  O    PHE A  131   27.50999  59.43361  30.82476 O_2    1 2 -0.51000
ATOM     682  CB   PHE A  131   27.71500  57.17825  33.09871 C_3    4 0  0.00000
ATOM     683 HCB   PHE A  131   27.63845  56.19974  32.61701 H_     1 0  0.00000
ATOM     684 HCB   PHE A  131   27.56135  57.01783  34.16943 H_     1 0  0.00000
ATOM     685  CG   PHE A  131   29.07506  57.75771  32.88588 C_R    3 0  0.00000
ATOM     686  CD1  PHE A  131   29.49089  58.90304  33.60667 C_R    3 0  0.00000
ATOM     687 HCD1  PHE A  131   28.89159  59.30235  34.33288 H_     1 0  0.00000
ATOM     688  CD2  PHE A  131   29.94091  57.22790  31.89927 C_R    3 0  0.00000
ATOM     689 HCD2  PHE A  131   29.67346  56.39732  31.36816 H_     1 0  0.00000
ATOM     690  CE1  PHE A  131   30.72152  59.52389  33.32161 C_R    3 0  0.00000
ATOM     691 HCE1  PHE A  131   31.00683  60.35774  33.84000 H_     1 0  0.00000
ATOM     692  CE2  PHE A  131   31.16614  57.85409  31.60777 C_R    3 0  0.00000
ATOM     693 HCE2  PHE A  131   31.77059  57.47655  30.87564 H_     1 0  0.00000
ATOM     694  CZ   PHE A  131   31.55405  59.00552  32.31479 C_R    3 0  0.00000
ATOM     695 HCZ   PHE A  131   32.43883  59.46797  32.09599 H_     1 0  0.00000
ATOM     696  N    PHE A  132   26.35424  57.63689  30.10974 N_R    3 0 -0.47000
ATOM     697 HN    PHE A  132   25.70525  56.97369  30.34417 H___A  1 0  0.31000
ATOM     698  CA   PHE A  132   26.61286  57.78614  28.70741 C_3    4 0  0.16000
ATOM     699 HCA   PHE A  132   27.40967  58.51550  28.54728 H_     1 0  0.00000
ATOM     700  C    PHE A  132   25.39909  58.32298  28.03923 C_R    3 0  0.51000
ATOM     701  O    PHE A  132   25.55921  59.18051  27.13629 O_2    1 2 -0.51000
ATOM     702  CB   PHE A  132   27.05693  56.43401  28.07344 C_3    4 0  0.00000
ATOM     703 HCB   PHE A  132   26.92340  56.47684  26.99041 H_     1 0  0.00000
ATOM     704 HCB   PHE A  132   26.38991  55.65794  28.44834 H_     1 0  0.00000
ATOM     705  CG   PHE A  132   28.48052  56.04873  28.28658 C_R    3 0  0.00000
ATOM     706  CD1  PHE A  132   29.52297  56.90057  27.84741 C_R    3 0  0.00000
ATOM     707 HCD1  PHE A  132   29.30468  57.79259  27.40514 H_     1 0  0.00000
ATOM     708  CD2  PHE A  132   28.83168  54.80346  28.86236 C_R    3 0  0.00000
ATOM     709 HCD2  PHE A  132   28.10983  54.15688  29.18607 H_     1 0  0.00000
ATOM     710  CE1  PHE A  132   30.87222  56.53758  28.00221 C_R    3 0  0.00000
ATOM     711 HCE1  PHE A  132   31.61602  57.16834  27.70194 H_     1 0  0.00000
ATOM     712  CE2  PHE A  132   30.18249  54.42569  28.98167 C_R    3 0  0.00000
ATOM     713 HCE2  PHE A  132   30.43197  53.51595  29.36712 H_     1 0  0.00000
ATOM     714  CZ   PHE A  132   31.19990  55.29800  28.56761 C_R    3 0  0.00000
ATOM     715 HCZ   PHE A  132   32.17699  55.02984  28.67379 H_     1 0  0.00000
ATOM     716  N    ASN A  133   24.13978  57.94195  28.38750 N_R    3 0 -0.47000
ATOM     717 HN    ASN A  133   24.06032  57.27425  29.07546 H___A  1 0  0.31000
ATOM     718  CA   ASN A  133   22.94968  58.52455  27.80929 C_3    4 0  0.16000
ATOM     719 HCA   ASN A  133   23.05513  58.40164  26.72975 H_     1 0  0.00000
ATOM     720  C    ASN A  133   22.87873  59.99457  28.10194 C_R    3 0  0.51000
ATOM     721  O    ASN A  133   22.47054  60.75600  27.18120 O_2    1 2 -0.51000
ATOM     722  CB   ASN A  133   21.64498  57.74991  28.19129 C_3    4 0  0.00000
ATOM     723 HCB   ASN A  133   21.36758  58.00849  29.21539 H_     1 0  0.00000
ATOM     724 HCB   ASN A  133   21.86537  56.68056  28.16539 H_     1 0  0.00000
ATOM     725  CG   ASN A  133   20.45559  57.98084  27.31984 C_R    3 0  0.55000
ATOM     726  OD1  ASN A  133   19.65782  57.08817  26.95920 O_2    1 2 -0.55000
ATOM     727  ND2  ASN A  133   20.16098  59.18827  26.84683 N_R    3 0 -0.60000
ATOM     728 HND2  ASN A  133   19.35723  59.34898  26.33349 H___A  1 0  0.30000
ATOM     729 HND2  ASN A  133   20.80946  59.86378  26.98423 H___A  1 0  0.30000
ATOM     730  N    PHE A  134   23.23734  60.51086  29.31349 N_R    3 0 -0.47000
ATOM     731 HN    PHE A  134   23.53542  59.93653  30.02644 H___A  1 0  0.31000
ATOM     732  CA   PHE A  134   23.15432  61.90168  29.67016 C_3    4 0  0.16000
ATOM     733 HCA   PHE A  134   22.93143  62.49962  28.78407 H_     1 0  0.00000
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ATOM    734  C    PHE A  134   24.40578  62.48047  30.25235 C_R    3 0  0.51000
ATOM    735  O    PHE A  134   24.86659  63.51901  29.72684 O_2    1 2 -0.51000
ATOM    736  CB   PHE A  134   21.96233  62.10129  30.64724 C_3    4 0  0.00000
ATOM    737 HCB   PHE A  134   21.85419  63.17014  30.84374 H_     1 0  0.00000
ATOM    738 HCB   PHE A  134   22.21385  61.61931  31.59519 H_     1 0  0.00000
ATOM    739  CG   PHE A  134   20.64276  61.60951  30.15273 C_R    3 0  0.00000
ATOM    740  CD1  PHE A  134   20.09419  62.09488  28.94245 C_R    3 0  0.00000
ATOM    741 HCD1  PHE A  134   20.61361  62.76079  28.37673 H_     1 0  0.00000
ATOM    742  CD2  PHE A  134   19.88880  60.66761  30.89080 C_R    3 0  0.00000
ATOM    743 HCD2  PHE A  134   20.24266  60.28762  31.76515 H_     1 0  0.00000
ATOM    744  CE1  PHE A  134   18.83274  61.66957  28.49033 C_R    3 0  0.00000
ATOM    745 HCE1  PHE A  134   18.45763  62.02534  27.60941 H_     1 0  0.00000
ATOM    746  CE2  PHE A  134   18.62447  60.24616  30.44788 C_R    3 0  0.00000
ATOM    747 HCE2  PHE A  134   18.09489  59.57574  31.00363 H_     1 0  0.00000
ATOM    748  CZ   PHE A  134   18.09260  60.75019  29.25005 C_R    3 0  0.00000
ATOM    749 HCZ   PHE A  134   17.17144  60.44881  28.93158 H_     1 0  0.00000
ATOM    750  N    ASP A  135   25.03756  61.99629  31.35154 N_R    3 0 -0.47000
ATOM    751 HN    ASP A  135   24.76472  61.12178  31.64325 H___A  1 0  0.31000
ATOM    752  CA   ASP A  135   26.01663  62.75438  32.11505 C_3    4 0  0.16000
ATOM    753 HCA   ASP A  135   25.51481  63.68376  32.40874 H_     1 0  0.00000
ATOM    754  C    ASP A  135   27.23691  63.13831  31.33895 C_R    3 0  0.51000
ATOM    755  O    ASP A  135   27.64109  64.32541  31.37894 O_2    1 2 -0.51000
ATOM    756  CB   ASP A  135   26.43288  62.07281  33.44606 C_3    4 0 -0.10000
ATOM    757 HCB   ASP A  135   27.09941  62.74267  33.99734 H_     1 0  0.00000
ATOM    758 HCB   ASP A  135   27.00939  61.18103  33.21417 H_     1 0  0.00000
ATOM    759  CG   ASP A  135   25.32822  61.73005  34.36785 C_R    3 0  0.62000
ATOM    760  OD1  ASP A  135   24.20513  62.28475  34.31968 O_2    1 2 -0.76000
ATOM    761  OD2  ASP A  135   25.52732  60.90721  35.28669 O_2    1 2 -0.76000
ATOM    762  N    ALA A  136   27.91755  62.24312  30.58332 N_R    3 0 -0.47000
ATOM    763 HN    ALA A  136   27.68188  61.32158  30.65978 H___A  1 0  0.31000
ATOM    764  CA   ALA A  136   28.99338  62.54653  29.67600 C_3    4 0  0.16000
ATOM    765 HCA   ALA A  136   29.73495  63.13709  30.22573 H_     1 0  0.00000
ATOM    766  C    ALA A  136   28.60202  63.33957  28.46902 C_R    3 0  0.51000
ATOM    767  O    ALA A  136   29.50803  63.68503  27.67121 O_2    1 2 -0.51000
ATOM    768  CB   ALA A  136   29.68694  61.22075  29.27494 C_3    4 0  0.00000
ATOM    769 HCB   ALA A  136   28.99596  60.57696  28.72877 H_     1 0  0.00000
ATOM    770 HCB   ALA A  136   30.55668  61.41971  28.64714 H_     1 0  0.00000
ATOM    771 HCB   ALA A  136   30.03237  60.69305  30.16543 H_     1 0  0.00000
ATOM    772  N    LEU A  137   27.33355  63.76599  28.24982 N_R    3 0 -0.47000
ATOM    773 HN    LEU A  137   26.62948  63.50207  28.84476 H___A  1 0  0.31000
ATOM    774  CA   LEU A  137   26.91259  64.75635  27.29851 C_3    4 0  0.16000
ATOM    775 HCA   LEU A  137   27.71580  65.00688  26.60941 H_     1 0  0.00000
ATOM    776  C    LEU A  137   26.57516  66.00953  28.04044 C_R    3 0  0.51000
ATOM    777  O    LEU A  137   26.50173  66.00210  29.29364 O_2    1 2 -0.51000
ATOM    778  CB   LEU A  137   25.68949  64.23253  26.48244 C_3    4 0  0.00000
ATOM    779 HCB   LEU A  137   25.30769  65.04215  25.86027 H_     1 0  0.00000
ATOM    780 HCB   LEU A  137   24.89582  63.98469  27.19053 H_     1 0  0.00000
ATOM    781  CG   LEU A  137   25.93318  62.98717  25.56750 C_3    4 0  0.00000
ATOM    782 HCG   LEU A  137   26.32153  62.17446  26.18971 H_     1 0  0.00000
ATOM    783  CD1  LEU A  137   24.59982  62.49105  24.94034 C_3    4 0  0.00000
ATOM    784 HCD1  LEU A  137   24.15905  63.26055  24.30393 H_     1 0  0.00000
ATOM    785 HCD1  LEU A  137   24.76695  61.59367  24.34263 H_     1 0  0.00000
ATOM    786 HCD1  LEU A  137   23.88807  62.24351  25.72238 H_     1 0  0.00000
ATOM    787  CD2  LEU A  137   26.95870  63.25416  24.43420 C_3    4 0  0.00000
ATOM    788 HCD2  LEU A  137   27.93719  63.47101  24.85492 H_     1 0  0.00000
ATOM    789 HCD2  LEU A  137   27.06012  62.37722  23.79431 H_     1 0  0.00000
ATOM    790 HCD2  LEU A  137   26.64425  64.09493  23.81573 H_     1 0  0.00000
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ATOM    791  N    ASN A  138   26.34150  67.18602  27.40023 N_R    3 0 -0.47000
ATOM    792 HN    ASN A  138   26.36778  67.16994  26.43090 H___A  1 0  0.31000
ATOM    793  CA   ASN A  138   26.04343  68.44511  28.05441 C_3    4 0  0.16000
ATOM    794 HCA   ASN A  138   26.66852  68.51754  28.95077 H_     1 0  0.00000
ATOM    795  C    ASN A  138   24.61863  68.51952  28.50588 C_R    3 0  0.51000
ATOM    796  O    ASN A  138   23.92797  69.54140  28.30393 O_2    1 2 -0.51000
ATOM    797  CB   ASN A  138   26.48060  69.61266  27.11621 C_3    4 0  0.00000
ATOM    798 HCB   ASN A  138   25.83667  69.61057  26.23585 H_     1 0  0.00000
ATOM    799 HCB   ASN A  138   27.50304  69.42310  26.77722 H_     1 0  0.00000
ATOM    800  CG   ASN A  138   26.45687  70.97500  27.70189 C_R    3 0  0.55000
ATOM    801  OD1  ASN A  138   26.83961  71.96118  27.04263 O_2    1 2 -0.55000
ATOM    802  ND2  ASN A  138   26.07634  71.28513  28.94831 N_R    3 0 -0.60000
ATOM    803 HND2  ASN A  138   26.04828  72.20847  29.23034 H___A  1 0  0.30000
ATOM    804 HND2  ASN A  138   25.76735  70.58782  29.54672 H___A  1 0  0.30000
ATOM    805  N    ILE A  139   24.08419  67.49212  29.19209 N_R    3 0 -0.47000
ATOM    806 HN    ILE A  139   24.71553  66.79404  29.36563 H___A  1 0  0.31000
ATOM    807  CA   ILE A  139   22.72463  67.35578  29.63320 C_3    4 0  0.16000
ATOM    808 HCA   ILE A  139   22.12575  68.20114  29.29604 H_     1 0  0.00000
ATOM    809  C    ILE A  139   22.75908  67.35158  31.13110 C_R    3 0  0.51000
ATOM    810  O    ILE A  139   23.06374  66.26926  31.67417 O_2    1 2 -0.51000
ATOM    811  CB   ILE A  139   22.05681  66.09588  28.96116 C_3    4 0  0.00000
ATOM    812 HCB   ILE A  139   22.63728  65.21342  29.24803 H_     1 0  0.00000
ATOM    813  CG1  ILE A  139   22.08527  66.19038  27.39372 C_3    4 0  0.00000
ATOM    814 HCG1  ILE A  139   23.07747  66.50434  27.06004 H_     1 0  0.00000
ATOM    815 HCG1  ILE A  139   21.37994  66.95602  27.06163 H_     1 0  0.00000
ATOM    816  CG2  ILE A  139   20.60007  65.89285  29.48149 C_3    4 0  0.00000
ATOM    817 HCG2  ILE A  139   19.98760  66.76157  29.25023 H_     1 0  0.00000
ATOM    818 HCG2  ILE A  139   20.13575  65.02136  29.02910 H_     1 0  0.00000
ATOM    819 HCG2  ILE A  139   20.59030  65.74095  30.55841 H_     1 0  0.00000
ATOM    820  CD1  ILE A  139   21.78446  64.87794  26.62995 C_3    4 0  0.00000
ATOM    821 HCD1  ILE A  139   20.76816  64.54336  26.80875 H_     1 0  0.00000
ATOM    822 HCD1  ILE A  139   21.90040  65.03991  25.55939 H_     1 0  0.00000
ATOM    823 HCD1  ILE A  139   22.47250  64.09410  26.93613 H_     1 0  0.00000
ATOM    824  N    PRO A  140   22.55270  68.42281  31.96166 N_R    3 0 -0.29000
ATOM    825  CA   PRO A  140   22.43294  68.30487  33.41172 C_3    4 0  0.11000
ATOM    826 HCA   PRO A  140   23.32721  67.80258  33.79728 H_     1 0  0.00000
ATOM    827  C    PRO A  140   21.26425  67.54805  33.88970 C_2    3 0  0.51000
ATOM    828  O    PRO A  140   20.48868  67.10976  33.05459 O_2    1 2 -0.51000
ATOM    829  CB   PRO A  140   22.44868  69.77262  33.91268 C_3    4 0  0.00000
ATOM    830 HCB   PRO A  140   23.46270  70.05066  34.21630 H_     1 0  0.00000
ATOM    831 HCB   PRO A  140   21.77597  69.95707  34.75502 H_     1 0  0.00000
ATOM    832  CG   PRO A  140   22.04102  70.60731  32.69187 C_3    4 0  0.00000
ATOM    833 HCG   PRO A  140   22.49870  71.60009  32.70272 H_     1 0  0.00000
ATOM    834 HCG   PRO A  140   20.95700  70.71187  32.64647 H_     1 0  0.00000
ATOM    835  CD   PRO A  140   22.50598  69.77401  31.49460 C_3    4 0  0.18000
ATOM    836 HCD   PRO A  140   21.81004  69.92266  30.66745 H_     1 0  0.00000
ATOM    837 HCD   PRO A  140   23.50826  70.08474  31.18521 H_     1 0  0.00000
ATOM    838  N    GLU A  141   21.05867  67.31508  35.18147 N_R    3 0 -0.47000
ATOM    839 HN    GLU A  141   21.71716  67.67345  35.79306 H___A  1 0  0.31000
ATOM    840  CA   GLU A  141   19.94904  66.58957  35.77903 C_3    4 0  0.16000
ATOM    841 HCA   GLU A  141   19.63607  65.81044  35.08158 H_     1 0  0.00000
ATOM    842  C    GLU A  141   18.75931  67.46912  35.97919 C_R    3 0  0.51000
ATOM    843  O    GLU A  141   17.95309  67.51111  35.02776 O_2    1 2 -0.51000
ATOM    844  CB   GLU A  141   20.42202  65.78414  37.03403 C_3    4 0  0.00000
ATOM    845 HCB   GLU A  141   21.09390  66.41948  37.61846 H_     1 0  0.00000
ATOM    846 HCB   GLU A  141   21.02548  64.94173  36.68039 H_     1 0  0.00000
ATOM    847  CG   GLU A  141   19.35568  65.21971  38.02556 C_3    4 0 -0.10000
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ATOM    848 HCG   GLU A  141   19.09631  66.01450  38.72622 H_     1 0  0.00000
ATOM    849 HCG   GLU A  141   19.81671  64.42975  38.62416 H_     1 0  0.00000
ATOM    850  CD   GLU A  141   18.10835  64.66765  37.45517 C_R    3 0  0.62000
ATOM    851  OE1  GLU A  141   18.07340  63.52833  36.93638 O_2    1 2 -0.76000
ATOM    852  OE2  GLU A  141   17.03821  65.30347  37.57546 O_2    1 2 -0.76000
ATOM    853  N    HSD A  142   18.52286  68.21145  37.09431 N_R    3 0 -0.47000
ATOM    854 HN    HSD A  142   19.21306  68.19191  37.77304 H___A  1 0  0.31000
ATOM    855  CA   HSD A  142   17.29203  68.91147  37.44851 C_3    4 0  0.16000
ATOM    856 HCA   HSD A  142   16.48326  68.17508  37.45772 H_     1 0  0.00000
ATOM    857  C    HSD A  142   16.84273  70.04693  36.57132 C_R    3 0  0.51000
ATOM    858  O    HSD A  142   15.97801  70.86423  36.96850 O_2    1 2 -0.51000
ATOM    859  CB   HSD A  142   17.45567  69.46039  38.90218 C_3    4 0  0.10000
ATOM    860 HCB   HSD A  142   16.53006  69.93990  39.23171 H_     1 0  0.00000
ATOM    861 HCB   HSD A  142   18.23897  70.22396  38.90437 H_     1 0  0.00000
ATOM    862  CG   HSD A  142   17.77804  68.45392  39.92961 C_R    3 0  0.22000
ATOM    863  ND1  HSD A  142   18.88832  68.45243  40.69109 N_R    2 1 -0.70000
ATOM    864  CD2  HSD A  142   16.98683  67.37788  40.31756 C_R    3 0  0.04000
ATOM    865 HCD2  HSD A  142   16.07937  67.11326  39.93170 H_     1 0  0.00000
ATOM    866  CE1  HSD A  142   18.78536  67.40532  41.52614 C_R    3 0  0.38000
ATOM    867 HCE1  HSD A  142   19.47747  67.14943  42.23093 H_     1 0  0.00000
ATOM    868  NE2  HSD A  142   17.63843  66.75266  41.30181 N_R    3 0 -0.36000
ATOM    869 HNE2  HSD A  142   17.33493  65.96109  41.76676 H___A  1 0  0.32000
ATOM    870  N    HSD A  143   17.36231  70.21331  35.34222 N_R    3 0 -0.47000
ATOM    871 HN    HSD A  143   17.80511  69.42482  35.04508 H___A  1 0  0.31000
ATOM    872  CA   HSD A  143   17.22611  71.31546  34.43369 C_3    4 0  0.16000
ATOM    873 HCA   HSD A  143   16.57717  72.06896  34.88602 H_     1 0  0.00000
ATOM    874  C    HSD A  143   16.59778  70.86497  33.14959 C_R    3 0  0.51000
ATOM    875  O    HSD A  143   16.93602  69.73066  32.71571 O_2    1 2 -0.51000
ATOM    876  CB   HSD A  143   18.62834  71.95087  34.19327 C_3    4 0  0.10000
ATOM    877 HCB   HSD A  143   18.66951  72.41712  33.20476 H_     1 0  0.00000
ATOM    878 HCB   HSD A  143   19.38958  71.17231  34.21745 H_     1 0  0.00000
ATOM    879  CG   HSD A  143   18.99494  72.97753  35.19194 C_R    3 0  0.22000
ATOM    880  ND1  HSD A  143   19.25248  74.27029  34.91798 N_R    2 1 -0.70000
ATOM    881  CD2  HSD A  143   19.14782  72.80255  36.56437 C_R    3 0  0.04000
ATOM    882 HCD2  HSD A  143   19.03193  71.93550  37.08822 H_     1 0  0.00000
ATOM    883  CE1  HSD A  143   19.54244  74.87649  36.08003 C_R    3 0  0.38000
ATOM    884 HCE1  HSD A  143   19.77841  75.86402  36.18430 H_     1 0  0.00000
ATOM    885  NE2  HSD A  143   19.47800  73.99024  37.08033 N_R    3 0 -0.36000
ATOM    886 HNE2  HSD A  143   19.64033  74.17889  38.01528 H___A  1 0  0.32000
ATOM    887  N    PRO A  144   15.74744  71.65948  32.41354 N_R    3 0 -0.29000
ATOM    888  CA   PRO A  144   14.85283  71.17653  31.38079 C_3    4 0  0.11000
ATOM    889 HCA   PRO A  144   14.14230  70.52142  31.88636 H_     1 0  0.00000
ATOM    890  C    PRO A  144   15.41783  70.41956  30.26921 C_2    3 0  0.51000
ATOM    891  O    PRO A  144   14.65472  69.82453  29.52252 O_2    1 2 -0.51000
ATOM    892  CB   PRO A  144   14.06771  72.42355  30.88984 C_3    4 0  0.00000
ATOM    893 HCB   PRO A  144   13.06972  72.44453  31.34034 H_     1 0  0.00000
ATOM    894 HCB   PRO A  144   13.95338  72.47867  29.80232 H_     1 0  0.00000
ATOM    895  CG   PRO A  144   14.88525  73.61176  31.40487 C_3    4 0  0.00000
ATOM    896 HCG   PRO A  144   14.25679  74.48021  31.61928 H_     1 0  0.00000
ATOM    897 HCG   PRO A  144   15.64989  73.88817  30.67230 H_     1 0  0.00000
ATOM    898  CD   PRO A  144   15.54378  73.05481  32.67231 C_3    4 0  0.18000
ATOM    899 HCD   PRO A  144   16.47862  73.58877  32.85972 H_     1 0  0.00000
ATOM    900 HCD   PRO A  144   14.87440  73.18053  33.52875 H_     1 0  0.00000
ATOM    901  N    ALA A  145   16.72088  70.34480  30.07673 N_R    3 0 -0.47000
ATOM    902 HN    ALA A  145   17.27024  70.90575  30.63966 H___A  1 0  0.31000
ATOM    903  CA   ALA A  145   17.39726  69.44449  29.19060 C_3    4 0  0.16000
ATOM    904 HCA   ALA A  145   17.10523  69.68730  28.16380 H_     1 0  0.00000
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ATOM    905  C    ALA A  145   17.08282  68.01340  29.48007 C_R    3 0  0.51000
ATOM    906  O    ALA A  145   16.67225  67.28452  28.54941 O_2    1 2 -0.51000
ATOM    907  CB   ALA A  145   18.91794  69.70352  29.30620 C_3    4 0  0.00000
ATOM    908 HCB   ALA A  145   19.26219  69.53052  30.32774 H_     1 0  0.00000
ATOM    909 HCB   ALA A  145   19.46560  69.04419  28.63427 H_     1 0  0.00000
ATOM    910 HCB   ALA A  145   19.14628  70.73491  29.03013 H_     1 0  0.00000
ATOM    911  N    ARG A  146   17.15619  67.49935  30.73300 N_R    3 0 -0.47000
ATOM    912 HN    ARG A  146   17.23420  68.14411  31.44614 H___A  1 0  0.31000
ATOM    913  CA   ARG A  146   16.94376  66.10064  31.06387 C_3    4 0  0.16000
ATOM    914 HCA   ARG A  146   17.60263  65.49230  30.43703 H_     1 0  0.00000
ATOM    915  C    ARG A  146   15.52247  65.76207  30.77665 C_R    3 0  0.51000
ATOM    916  O    ARG A  146   15.20853  64.81955  30.00629 O_2    1 2 -0.51000
ATOM    917  CB   ARG A  146   17.32463  65.84922  32.55275 C_3    4 0  0.00000
ATOM    918 HCB   ARG A  146   16.55935  66.31160  33.18107 H_     1 0  0.00000
ATOM    919 HCB   ARG A  146   18.24666  66.37817  32.74751 H_     1 0  0.00000
ATOM    920  CG   ARG A  146   17.51880  64.37968  33.04466 C_3    4 0  0.00000
ATOM    921 HCG   ARG A  146   16.66251  63.78971  32.70634 H_     1 0  0.00000
ATOM    922 HCG   ARG A  146   17.49058  64.38479  34.13749 H_     1 0  0.00000
ATOM    923  CD   ARG A  146   18.82147  63.64330  32.62450 C_3    4 0  0.38000
ATOM    924 HCD   ARG A  146   18.84303  63.59706  31.53457 H_     1 0  0.00000
ATOM    925 HCD   ARG A  146   18.77121  62.61439  32.99232 H_     1 0  0.00000
ATOM    926  NE   ARG A  146   20.04804  64.26015  33.03866 N_R    3 0 -0.70000
ATOM    927 HNE   ARG A  146   20.14326  65.20255  32.93320 H___A  1 0  0.44000
ATOM    928  CZ   ARG A  146   21.13045  63.65828  33.54522 C_R    3 0  0.64000
ATOM    929  NH1  ARG A  146   21.31557  62.46882  34.08677 N_R    3 0 -0.80000
ATOM    930 HNH1  ARG A  146   22.23556  62.25281  34.26746 H___A  1 0  0.46000
ATOM    931 HNH1  ARG A  146   20.64752  61.82434  34.32243 H___A  1 0  0.46000
ATOM    932  NH2  ARG A  146   22.31027  64.23812  33.46810 N_R    3 0 -0.80000
ATOM    933 HNH2  ARG A  146   23.04627  63.72639  33.80904 H___A  1 0  0.46000
ATOM    934 HNH2  ARG A  146   22.46619  65.02345  32.96389 H___A  1 0  0.46000
ATOM    935  N    ASP A  147   14.58068  66.59291  31.27050 N_R    3 0 -0.47000
ATOM    936 HN    ASP A  147   14.83271  67.25134  31.92175 H___A  1 0  0.31000
ATOM    937  CA   ASP A  147   13.18198  66.60638  31.01121 C_3    4 0  0.16000
ATOM    938 HCA   ASP A  147   12.78989  65.66383  31.40593 H_     1 0  0.00000
ATOM    939  C    ASP A  147   12.81075  66.68395  29.56293 C_R    3 0  0.51000
ATOM    940  O    ASP A  147   11.59154  66.56382  29.29182 O_2    1 2 -0.51000
ATOM    941  CB   ASP A  147   12.52817  67.77583  31.82321 C_3    4 0 -0.10000
ATOM    942 HCB   ASP A  147   11.45333  67.58353  31.88729 H_     1 0  0.00000
ATOM    943 HCB   ASP A  147   12.64735  68.71138  31.27363 H_     1 0  0.00000
ATOM    944  CG   ASP A  147   13.05174  68.00109  33.19728 C_R    3 0  0.62000
ATOM    945  OD1  ASP A  147   14.21803  68.42791  33.38556 O_2    1 2 -0.76000
ATOM    946  OD2  ASP A  147   12.33076  67.82241  34.20352 O_2    1 2 -0.76000
ATOM    947  N    MET A  148   13.69758  66.81898  28.53212 N_R    3 0 -0.47000
ATOM    948 HN    MET A  148   14.63120  66.97842  28.70517 H___A  1 0  0.31000
ATOM    949  CA   MET A  148   13.33503  66.60417  27.15147 C_3    4 0  0.16000
ATOM    950 HCA   MET A  148   12.42635  67.17621  26.93514 H_     1 0  0.00000
ATOM    951  C    MET A  148   13.06103  65.16234  26.86945 C_R    3 0  0.51000
ATOM    952  O    MET A  148   12.45927  64.89459  25.80126 O_2    1 2 -0.51000
ATOM    953  CB   MET A  148   14.44268  67.09410  26.16720 C_3    4 0  0.00000
ATOM    954 HCB   MET A  148   14.19211  66.78334  25.14782 H_     1 0  0.00000
ATOM    955 HCB   MET A  148   15.38119  66.60979  26.42957 H_     1 0  0.00000
ATOM    956  CG   MET A  148   14.66003  68.62408  26.12558 C_3    4 0  0.04000
ATOM    957 HCG   MET A  148   14.87078  68.99680  27.12440 H_     1 0  0.00000
ATOM    958 HCG   MET A  148   13.75797  69.11136  25.74875 H_     1 0  0.00000
ATOM    959  SD   MET A  148   16.05980  69.02352  25.04476 S_3    2 0 -0.09000
ATOM    960  CE   MET A  148   15.96981  70.82125  25.17763 C_3    4 0  0.05000
ATOM    961 HCE   MET A  148   16.10580  71.13241  26.21365 H_     1 0  0.00000
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ATOM     962 HCE   MET A  148   16.76283  71.25416  24.56923 H_     1 0  0.00000
ATOM     963 HCE   MET A  148   15.00696  71.17802  24.81051 H_     1 0  0.00000
ATOM     964  N    TRP A  149   13.52638  64.16059  27.66478 N_R    3 0 -0.47000
ATOM     965 HN    TRP A  149   14.01122  64.40348  28.46054 H___A  1 0  0.31000
ATOM     966  CA   TRP A  149   13.47212  62.75633  27.33958 C_3    4 0  0.16000
ATOM     967 HCA   TRP A  149   12.89136  62.58843  26.42767 H_     1 0  0.00000
ATOM     968  C    TRP A  149   12.85058  61.90391  28.40345 C_R    3 0  0.51000
ATOM     969  O    TRP A  149   13.40872  61.79513  29.51923 O_2    1 2 -0.51000
ATOM     970  CB   TRP A  149   14.93488  62.32343  27.03491 C_3    4 0  0.00000
ATOM     971 HCB   TRP A  149   14.93317  61.25455  26.86025 H_     1 0  0.00000
ATOM     972 HCB   TRP A  149   15.56426  62.51581  27.90805 H_     1 0  0.00000
ATOM     973  CG   TRP A  149   15.52697  62.96701  25.83272 C_R    3 0 -0.03000
ATOM     974  CD1  TRP A  149   15.15457  62.71788  24.50887 C_R    3 0  0.15000
ATOM     975 HCD1  TRP A  149   14.43535  62.05980  24.22122 H_     1 0  0.00000
ATOM     976  CD2  TRP A  149   16.53281  63.93347  25.75525 C_R    3 0 -0.02000
ATOM     977  NE1  TRP A  149   15.87956  63.48318  23.67422 N_R    3 0 -0.61000
ATOM     978 HNE1  TRP A  149   15.81294  63.53667  22.71848 H___A  1 0  0.38000
ATOM     979  CE2  TRP A  149   16.71940  64.22413  24.40267 C_R    3 0  0.13000
ATOM     980  CE3  TRP A  149   17.28466  64.60749  26.73683 C_R    3 0  0.00000
ATOM     981 HCE3  TRP A  149   17.15484  64.40949  27.73025 H_     1 0  0.00000
ATOM     982  CZ2  TRP A  149   17.65398  65.17878  23.97080 C_R    3 0  0.00000
ATOM     983 HCZ2  TRP A  149   17.78095  65.37329  22.97580 H_     1 0  0.00000
ATOM     984  CZ3  TRP A  149   18.21138  65.58806  26.31874 C_R    3 0  0.00000
ATOM     985 HCZ3  TRP A  149   18.74830  66.10651  27.01446 H_     1 0  0.00000
ATOM     986  CH2  TRP A  149   18.40227  65.86636  24.94670 C_R    3 0  0.00000
ATOM     987 HCH2  TRP A  149   19.08251  66.57219  24.65863 H_     1 0  0.00000
ATOM     988  N    ASP A  150   11.69278  61.23243  28.17862 N_R    3 0 -0.47000
ATOM     989 HN    ASP A  150   11.21874  61.40780  27.36247 H___A  1 0  0.31000
ATOM     990  CA   ASP A  150   10.94292  60.37420  29.06187 C_3    4 0  0.16000
ATOM     991 HCA   ASP A  150   10.90022  60.89125  30.02662 H_     1 0  0.00000
ATOM     992  C    ASP A  150   11.58294  59.02743  29.27027 C_R    3 0  0.51000
ATOM     993  O    ASP A  150   11.50779  58.12383  28.40132 O_2    1 2 -0.51000
ATOM     994  CB   ASP A  150    9.45692  60.25002  28.55992 C_3    4 0 -0.10000
ATOM     995 HCB   ASP A  150    8.80936  60.13681  29.43409 H_     1 0  0.00000
ATOM     996 HCB   ASP A  150    9.32832  59.34974  27.96145 H_     1 0  0.00000
ATOM     997  CG   ASP A  150    8.93749  61.35777  27.72029 C_R    3 0  0.62000
ATOM     998  OD1  ASP A  150    9.41158  61.56178  26.57604 O_2    1 2 -0.76000
ATOM     999  OD2  ASP A  150    8.02290  62.10330  28.13350 O_2    1 2 -0.76000
ATOM    1000  N    THR A  151   12.27576  58.76006  30.40214 N_R    3 0 -0.47000
ATOM    1001 HN    THR A  151   12.21802  59.43301  31.10065 H___A  1 0  0.31000
ATOM    1002  CA   THR A  151   13.17216  57.64785  30.63845 C_3    4 0  0.16000
ATOM    1003 HCA   THR A  151   13.73633  57.46335  29.71820 H_     1 0  0.00000
ATOM    1004  C    THR A  151   12.55689  56.34977  31.08316 C_R    3 0  0.51000
ATOM    1005  O    THR A  151   11.85244  56.30595  32.12491 O_2    1 2 -0.51000
ATOM    1006  CB   THR A  151   14.20652  58.09389  31.72486 C_3    4 0  0.23000
ATOM    1007 HCB   THR A  151   14.83867  57.24087  31.99777 H_     1 0  0.00000
ATOM    1008  OG1  THR A  151   13.49998  58.50202  32.89657 O_3    2 2 -0.66000
ATOM    1009 HOG1  THR A  151   12.84092  57.79358  32.92276 H___A  1 0  0.43000
ATOM    1010  CG2  THR A  151   15.14608  59.23702  31.28410 C_3    4 0  0.00000
ATOM    1011 HCG2  THR A  151   14.57850  60.13801  31.06749 H_     1 0  0.00000
ATOM    1012 HCG2  THR A  151   15.85379  59.46383  32.08148 H_     1 0  0.00000
ATOM    1013 HCG2  THR A  151   15.69912  58.94071  30.39346 H_     1 0  0.00000
ATOM    1014  N    PHE A  152   12.88416  55.19148  30.45045 N_R    3 0 -0.47000
ATOM    1015 HN    PHE A  152   13.39013  55.27954  29.62700 H___A  1 0  0.31000
ATOM    1016  CA   PHE A  152   12.64370  53.84750  30.92668 C_3    4 0  0.16000
ATOM    1017 HCA   PHE A  152   11.72661  53.82268  31.52262 H_     1 0  0.00000
ATOM    1018  C    PHE A  152   13.77488  53.38257  31.79799 C_R    3 0  0.51000
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ATOM    1019  O    PHE A  152   14.77022  52.81435  31.27837 O_2    1 2 -0.51000
ATOM    1020  CB   PHE A  152   12.46516  52.85878  29.72925 C_3    4 0  0.00000
ATOM    1021 HCB   PHE A  152   12.66660  51.83841  30.07003 H_     1 0  0.00000
ATOM    1022 HCB   PHE A  152   13.23458  53.09163  28.98911 H_     1 0  0.00000
ATOM    1023  CG   PHE A  152   11.13084  52.78726  29.08085 C_R    3 0  0.00000
ATOM    1024  CD1  PHE A  152   10.01072  52.29929  29.79525 C_R    3 0  0.00000
ATOM    1025 HCD1  PHE A  152   10.08846  52.07468  30.78976 H_     1 0  0.00000
ATOM    1026  CD2  PHE A  152   10.97944  53.08679  27.70760 C_R    3 0  0.00000
ATOM    1027 HCD2  PHE A  152   11.76185  53.46813  27.17396 H_     1 0  0.00000
ATOM    1028  CE1  PHE A  152    8.78315  52.08117  29.14274 C_R    3 0  0.00000
ATOM    1029 HCE1  PHE A  152    7.98236  51.72259  29.66722 H_     1 0  0.00000
ATOM    1030  CE2  PHE A  152    9.76390  52.83107  27.04827 C_R    3 0  0.00000
ATOM    1031 HCE2  PHE A  152    9.68562  52.99220  26.04343 H_     1 0  0.00000
ATOM    1032  CZ   PHE A  152    8.66080  52.34126  27.76682 C_R    3 0  0.00000
ATOM    1033 HCZ   PHE A  152    7.77313  52.17105  27.28871 H_     1 0  0.00000
ATOM    1034  N    TRP A  153   13.70330  53.54673  33.14335 N_R    3 0 -0.47000
ATOM    1035 HN    TRP A  153   12.91840  54.01299  33.46715 H___A  1 0  0.31000
ATOM    1036  CA   TRP A  153   14.65233  53.08575  34.13375 C_3    4 0  0.16000
ATOM    1037 HCA   TRP A  153   15.65822  53.33141  33.78507 H_     1 0  0.00000
ATOM    1038  C    TRP A  153   14.57935  51.61894  34.39924 C_R    3 0  0.51000
ATOM    1039  O    TRP A  153   13.45277  51.09484  34.57123 O_2    1 2 -0.51000
ATOM    1040  CB   TRP A  153   14.41603  53.80900  35.49623 C_3    4 0  0.00000
ATOM    1041 HCB   TRP A  153   15.13987  53.45307  36.23555 H_     1 0  0.00000
ATOM    1042 HCB   TRP A  153   13.41914  53.55268  35.86772 H_     1 0  0.00000
ATOM    1043  CG   TRP A  153   14.53636  55.27991  35.43643 C_R    3 0 -0.03000
ATOM    1044  CD1  TRP A  153   13.50884  56.20507  35.63670 C_R    3 0  0.15000
ATOM    1045 HCD1  TRP A  153   12.53689  55.98011  35.85467 H_     1 0  0.00000
ATOM    1046  CD2  TRP A  153   15.67674  56.03357  35.16662 C_R    3 0 -0.02000
ATOM    1047  NE1  TRP A  153   13.99209  57.44761  35.47918 N_R    3 0 -0.61000
ATOM    1048 HNE1  TRP A  153   13.47907  58.27059  35.53797 H___A  1 0  0.38000
ATOM    1049  CE2  TRP A  153   15.29377  57.37376  35.17040 C_R    3 0  0.13000
ATOM    1050  CE3  TRP A  153   17.00922  55.66575  34.90830 C_R    3 0  0.00000
ATOM    1051 HCE3  TRP A  153   17.30585  54.69014  34.95496 H_     1 0  0.00000
ATOM    1052  CZ2  TRP A  153   16.20375  58.39427  34.85166 C_R    3 0  0.00000
ATOM    1053 HCZ2  TRP A  153   15.91097  59.37322  34.84157 H_     1 0  0.00000
ATOM    1054  CZ3  TRP A  153   17.93037  56.67699  34.56720 C_R    3 0  0.00000
ATOM    1055 HCZ3  TRP A  153   18.89469  56.42679  34.34501 H_     1 0  0.00000
ATOM    1056  CH2  TRP A  153   17.52277  58.02794  34.51614 C_R    3 0  0.00000
ATOM    1057 HCH2  TRP A  153   18.18395  58.74418  34.22538 H_     1 0  0.00000
ATOM    1058  N    LEU A  154   15.70481  50.87397  34.53744 N_R    3 0 -0.47000
ATOM    1059 HN    LEU A  154   16.54519  51.32711  34.44466 H___A  1 0  0.31000
ATOM    1060  CA   LEU A  154   15.78407  49.45869  34.80939 C_3    4 0  0.16000
ATOM    1061 HCA   LEU A  154   14.78713  49.01001  34.81981 H_     1 0  0.00000
ATOM    1062  C    LEU A  154   16.38561  49.20285  36.15049 C_R    3 0  0.51000
ATOM    1063  O    LEU A  154   17.51744  49.66737  36.41681 O_2    1 2 -0.51000
ATOM    1064  CB   LEU A  154   16.60819  48.76975  33.66844 C_3    4 0  0.00000
ATOM    1065 HCB   LEU A  154   17.17975  47.93378  34.08804 H_     1 0  0.00000
ATOM    1066 HCB   LEU A  154   17.34603  49.47522  33.26973 H_     1 0  0.00000
ATOM    1067  CG   LEU A  154   15.76273  48.18530  32.49012 C_3    4 0  0.00000
ATOM    1068 HCG   LEU A  154   15.15805  47.36571  32.89156 H_     1 0  0.00000
ATOM    1069  CD1  LEU A  154   14.78249  49.20499  31.84921 C_3    4 0  0.00000
ATOM    1070 HCD1  LEU A  154   15.32027  50.08624  31.49796 H_     1 0  0.00000
ATOM    1071 HCD1  LEU A  154   14.25413  48.74835  31.01310 H_     1 0  0.00000
ATOM    1072 HCD1  LEU A  154   14.02359  49.51524  32.56216 H_     1 0  0.00000
ATOM    1073  CD2  LEU A  154   16.68916  47.57955  31.40053 C_3    4 0  0.00000
ATOM    1074 HCD2  LEU A  154   17.32325  46.80052  31.82753 H_     1 0  0.00000
ATOM    1075 HCD2  LEU A  154   16.09819  47.13096  30.60035 H_     1 0  0.00000
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ATOM   1076 HCD2 LEU A 154   17.32615  48.35391  30.97011 H_      1 0  0.00000
ATOM   1077  N   THR A 155   15.73822  48.43273  37.06220 N_R     3 0 -0.47000
ATOM   1078 HN   THR A 155   14.85564  48.11653  36.81360 H___A   1 0  0.31000
ATOM   1079  CA  THR A 155   16.24039  48.01642  38.34993 C_3     4 0  0.16000
ATOM   1080 HCA  THR A 155   17.17007  48.54432  38.58441 H_      1 0  0.00000
ATOM   1081  C   THR A 155   16.54851  46.55189  38.30990 C_R     3 0  0.51000
ATOM   1082  O   THR A 155   15.62179  45.70837  38.18815 O_2     1 2 -0.51000
ATOM   1083  CB  THR A 155   15.23550  48.36504  39.50021 C_3     4 0  0.23000
ATOM   1084 HCB  THR A 155   15.64401  47.98243  40.44176 H_      1 0  0.00000
ATOM   1085  OG1 THR A 155   13.97531  47.72019  39.30120 O_3     2 2 -0.66000
ATOM   1086 HOG1 THR A 155   14.29544  46.87279  38.96476 H___A   1 0  0.43000
ATOM   1087  CG2 THR A 155   14.99583  49.88280  39.67634 C_3     4 0  0.00000
ATOM   1088 HCG2 THR A 155   14.57832  50.31298  38.76505 H_      1 0  0.00000
ATOM   1089 HCG2 THR A 155   14.29569  50.05569  40.49557 H_      1 0  0.00000
ATOM   1090 HCG2 THR A 155   15.93414  50.38748  39.91048 H_      1 0  0.00000
ATOM   1091  N   GLY A 156   17.82822  46.11849  38.39624 N_R     3 0 -0.47000
ATOM   1092 HN   GLY A 156   18.52761  46.79094  38.44190 H___A   1 0  0.31000
ATOM   1093  CA  GLY A 156   18.23007  44.74343  38.38842 C_3     4 0  0.16000
ATOM   1094 HCA  GLY A 156   17.96817  44.29350  37.42736 H_      1 0  0.00000
ATOM   1095 HCA  GLY A 156   17.68577  44.20839  39.17228 H_      1 0  0.00000
ATOM   1096  C   GLY A 156   19.68810  44.58987  38.59778 C_R     3 0  0.51000
ATOM   1097  O   GLY A 156   20.46799  45.07794  37.74867 O_2     1 2 -0.51000
ATOM   1098  N   GLU A 157   20.15826  43.92348  39.67896 N_R     3 0 -0.47000
ATOM   1099 HN   GLU A 157   19.49961  43.53460  40.27106 H___A   1 0  0.31000
ATOM   1100  CA  GLU A 157   21.54465  43.71637  40.02119 C_3     4 0  0.16000
ATOM   1101 HCA  GLU A 157   22.12932  44.55696  39.63676 H_      1 0  0.00000
ATOM   1102  C   GLU A 157   22.09800  42.46842  39.41575 C_R     3 0  0.51000
ATOM   1103  O   GLU A 157   21.34886  41.69992  38.76138 O_2     1 2 -0.51000
ATOM   1104  CB  GLU A 157   21.62849  43.73220  41.58304 C_3     4 0  0.00000
ATOM   1105 HCB  GLU A 157   21.04460  42.89481  41.97658 H_      1 0  0.00000
ATOM   1106 HCB  GLU A 157   21.15367  44.65050  41.94281 H_      1 0  0.00000
ATOM   1107  CG  GLU A 157   23.04321  43.65963  42.22339 C_3     4 0 -0.10000
ATOM   1108 HCG  GLU A 157   23.44101  42.64846  42.11274 H_      1 0  0.00000
ATOM   1109 HCG  GLU A 157   22.96544  43.84815  43.29717 H_      1 0  0.00000
ATOM   1110  CD  GLU A 157   23.98565  44.63305  41.64882 C_R     3 0  0.62000
ATOM   1111  OE1 GLU A 157   23.83620  45.85261  41.87438 O_2     1 2 -0.76000
ATOM   1112  OE2 GLU A 157   24.89683  44.23165  40.88886 O_2     1 2 -0.76000
ATOM   1113  N   GLY A 158   23.41970  42.17552  39.51394 N_R     3 0 -0.47000
ATOM   1114 HN   GLY A 158   23.95912  42.83941  39.95436 H___A   1 0  0.31000
ATOM   1115  CA  GLY A 158   24.08018  41.00887  38.98560 C_3     4 0  0.16000
ATOM   1116 HCA  GLY A 158   23.48892  40.11381  39.18981 H_      1 0  0.00000
ATOM   1117 HCA  GLY A 158   25.02777  40.90534  39.51864 H_      1 0  0.00000
ATOM   1118  C   GLY A 158   24.35296  41.09158  37.52907 C_R     3 0  0.51000
ATOM   1119  O   GLY A 158   25.39109  40.59306  37.02812 O_2     1 2 -0.51000
ATOM   1120  N   PHE A 159   23.44491  41.73572  36.76792 N_R     3 0 -0.47000
ATOM   1121 HN   PHE A 159   22.62610  41.89114  37.23949 H___A   1 0  0.31000
ATOM   1122  CA  PHE A 159   23.63423  42.28199  35.45773 C_3     4 0  0.16000
ATOM   1123 HCA  PHE A 159   23.86265  41.45697  34.77446 H_      1 0  0.00000
ATOM   1124  C   PHE A 159   24.75555  43.26488  35.47612 C_R     3 0  0.51000
ATOM   1125  O   PHE A 159   24.73385  44.20842  36.29843 O_2     1 2 -0.51000
ATOM   1126  CB  PHE A 159   22.30709  42.95304  34.98894 C_3     4 0  0.00000
ATOM   1127 HCB  PHE A 159   22.03723  43.76174  35.67497 H_      1 0  0.00000
ATOM   1128 HCB  PHE A 159   21.50172  42.21562  35.05938 H_      1 0  0.00000
ATOM   1129  CG  PHE A 159   22.36903  43.48717  33.59777 C_R     3 0  0.00000
ATOM   1130  CD1 PHE A 159   21.91081  42.71332  32.50507 C_R     3 0  0.00000
ATOM   1131 HCD1 PHE A 159   21.52062  41.78063  32.65969 H_      1 0  0.00000
ATOM   1132  CD2 PHE A 159   22.89752  44.77576  33.33795 C_R     3 0  0.00000
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ATOM   1133 HCD2  PHE A  159   23.22907  45.36417  34.10568 H_      1 0  0.00000
ATOM   1134  CE1  PHE A  159   21.98783  43.20928  31.18995 C_R     3 0  0.00000
ATOM   1135 HCE1  PHE A  159   21.65190  42.64118  30.40918 H_      1 0  0.00000
ATOM   1136  CE2  PHE A  159   22.98183  45.26801  32.02265 C_R     3 0  0.00000
ATOM   1137 HCE2  PHE A  159   23.36978  46.19655  31.84730 H_      1 0  0.00000
ATOM   1138  CZ   PHE A  159   22.52878  44.48390  30.94822 C_R     3 0  0.00000
ATOM   1139 HCZ   PHE A  159   22.59093  44.84060  29.99238 H_      1 0  0.00000
ATOM   1140  N    ARG A  160   25.77201  43.14078  34.59742 N_R     3 0 -0.47000
ATOM   1141 HN    ARG A  160   25.72745  42.39971  33.97650 H___A   1 0  0.31000
ATOM   1142  CA   ARG A  160   26.89445  44.02656  34.45069 C_3     4 0  0.16000
ATOM   1143 HCA   ARG A  160   26.91486  44.78872  35.23781 H_      1 0  0.00000
ATOM   1144  C    ARG A  160   26.79172  44.70588  33.13972 C_R     3 0  0.51000
ATOM   1145  O    ARG A  160   26.57659  44.01669  32.11201 O_2     1 2 -0.51000
ATOM   1146  CB   ARG A  160   28.21406  43.21188  34.53195 C_3     4 0  0.00000
ATOM   1147 HCB   ARG A  160   29.02996  43.78685  34.09198 H_      1 0  0.00000
ATOM   1148 HCB   ARG A  160   28.10820  42.32146  33.90581 H_      1 0  0.00000
ATOM   1149  CG   ARG A  160   28.61574  42.83282  35.99233 C_3     4 0  0.00000
ATOM   1150 HCG   ARG A  160   27.76591  42.94895  36.67196 H_      1 0  0.00000
ATOM   1151 HCG   ARG A  160   29.38972  43.51776  36.34281 H_      1 0  0.00000
ATOM   1152  CD   ARG A  160   29.13869  41.38603  36.11948 C_3     4 0  0.38000
ATOM   1153 HCD   ARG A  160   29.49761  41.21454  37.13666 H_      1 0  0.00000
ATOM   1154 HCD   ARG A  160   29.97215  41.22408  35.43078 H_      1 0  0.00000
ATOM   1155  NE   ARG A  160   28.03823  40.51228  35.88077 N_R     3 0 -0.70000
ATOM   1156 HNE   ARG A  160   27.24801  40.62769  36.40580 H___A   1 0  0.44000
ATOM   1157  CZ   ARG A  160   27.90591  39.59661  34.92875 C_R     3 0  0.64000
ATOM   1158  NH1  ARG A  160   28.81641  39.26914  34.02411 N_R     3 0 -0.80000
ATOM   1159 HNH1  ARG A  160   28.62489  38.60376  33.35381 H___A   1 0  0.46000
ATOM   1160 HNH1  ARG A  160   29.67082  39.72914  34.01981 H___A   1 0  0.46000
ATOM   1161  NH2  ARG A  160   26.70739  39.04332  34.93586 N_R     3 0 -0.80000
ATOM   1162 HNH2  ARG A  160   26.45057  38.35943  34.30676 H___A   1 0  0.46000
ATOM   1163 HNH2  ARG A  160   26.10610  39.39709  35.59487 H___A   1 0  0.46000
ATOM   1164  N    LEU A  161   26.95104  46.04601  33.06631 N_R     3 0 -0.47000
ATOM   1165 HN    LEU A  161   27.12745  46.52155  33.89374 H___A   1 0  0.31000
ATOM   1166  CA   LEU A  161   26.93286  46.80888  31.85920 C_3     4 0  0.16000
ATOM   1167 HCA   LEU A  161   26.37306  46.25163  31.10184 H_      1 0  0.00000
ATOM   1168  C    LEU A  161   28.31927  47.04679  31.37959 C_R     3 0  0.51000
ATOM   1169  O    LEU A  161   29.13740  47.70722  32.06808 O_2     1 2 -0.51000
ATOM   1170  CB   LEU A  161   26.16088  48.13504  32.07085 C_3     4 0  0.00000
ATOM   1171 HCB   LEU A  161   26.61383  48.65873  32.91829 H_      1 0  0.00000
ATOM   1172 HCB   LEU A  161   25.13079  47.89992  32.35410 H_      1 0  0.00000
ATOM   1173  CG   LEU A  161   26.14731  49.08224  30.82880 C_3     4 0  0.00000
ATOM   1174 HCG   LEU A  161   27.17740  49.31519  30.55387 H_      1 0  0.00000
ATOM   1175  CD1  LEU A  161   25.46953  48.46705  29.57551 C_3     4 0  0.00000
ATOM   1176 HCD1  LEU A  161   24.44298  48.17565  29.80353 H_      1 0  0.00000
ATOM   1177 HCD1  LEU A  161   25.46549  49.18968  28.75836 H_      1 0  0.00000
ATOM   1178 HCD1  LEU A  161   26.01297  47.59013  29.22554 H_      1 0  0.00000
ATOM   1179  CD2  LEU A  161   25.48274  50.42074  31.20339 C_3     4 0  0.00000
ATOM   1180 HCD2  LEU A  161   25.96548  50.83411  32.08549 H_      1 0  0.00000
ATOM   1181 HCD2  LEU A  161   25.60228  51.12925  30.38605 H_      1 0  0.00000
ATOM   1182 HCD2  LEU A  161   24.42202  50.28325  31.41697 H_      1 0  0.00000
ATOM   1183  N    GLU A  162   28.63830  46.57242  30.15767 N_R     3 0 -0.47000
ATOM   1184 HN    GLU A  162   27.95037  46.06959  29.70003 H___A   1 0  0.31000
ATOM   1185  CA   GLU A  162   29.88690  46.71110  29.47755 C_3     4 0  0.16000
ATOM   1186 HCA   GLU A  162   30.65525  46.34642  30.16384 H_      1 0  0.00000
ATOM   1187  C    GLU A  162   30.18696  48.12411  29.10330 C_R     3 0  0.51000
ATOM   1188  O    GLU A  162   29.33344  48.79860  28.47517 O_2     1 2 -0.51000
ATOM   1189  CB   GLU A  162   29.86412  45.79047  28.20854 C_3     4 0  0.00000
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ATOM    1190 HCB   GLU A  162   29.57546  46.36950  27.32555 H_     1 0  0.00000
ATOM    1191 HCB   GLU A  162   29.10555  45.00765  28.30935 H_     1 0  0.00000
ATOM    1192  CG   GLU A  162   31.21789  45.09004  27.91112 C_3    4 0 -0.10000
ATOM    1193 HCG   GLU A  162   32.01012  45.84112  27.90334 H_     1 0  0.00000
ATOM    1194 HCG   GLU A  162   31.16327  44.65289  26.91096 H_     1 0  0.00000
ATOM    1195  CD   GLU A  162   31.57902  43.99706  28.84305 C_R    3 0  0.62000
ATOM    1196  OE1  GLU A  162   30.81613  43.62124  29.76252 O_2    1 2 -0.76000
ATOM    1197  OE2  GLU A  162   32.64182  43.36241  28.66354 O_2    1 2 -0.76000
ATOM    1198  N    GLY A  163   31.38432  48.66792  29.41148 N_R    3 0 -0.47000
ATOM    1199 HN    GLY A  163   31.94103  48.14330  29.98114 H___A  1 0  0.31000
ATOM    1200  CA   GLY A  163   31.90744  49.92818  28.98304 C_3    4 0  0.16000
ATOM    1201 HCA   GLY A  163   32.44765  50.36042  29.82392 H_     1 0  0.00000
ATOM    1202 HCA   GLY A  163   31.08286  50.60400  28.75021 H_     1 0  0.00000
ATOM    1203  C    GLY A  163   32.82224  49.85391  27.80227 C_R    3 0  0.51000
ATOM    1204  O    GLY A  163   33.19401  48.72429  27.39597 O_2    1 2 -0.51000
ATOM    1205  N    PRO A  164   33.21597  50.96497  27.10390 N_R    3 0 -0.29000
ATOM    1206  CA   PRO A  164   33.79833  50.94503  25.77863 C_3    4 0  0.11000
ATOM    1207 HCA   PRO A  164   32.98005  50.59656  25.13501 H_     1 0  0.00000
ATOM    1208  C    PRO A  164   34.95190  50.09925  25.45453 C_2    3 0  0.51000
ATOM    1209  O    PRO A  164   35.16353  49.93966  24.25781 O_2    1 2 -0.51000
ATOM    1210  CB   PRO A  164   34.06637  52.43622  25.42662 C_3    4 0  0.00000
ATOM    1211 HCB   PRO A  164   33.34119  52.78551  24.68709 H_     1 0  0.00000
ATOM    1212 HCB   PRO A  164   35.07115  52.62853  25.04153 H_     1 0  0.00000
ATOM    1213  CG   PRO A  164   33.86676  53.18935  26.74371 C_3    4 0  0.00000
ATOM    1214 HCG   PRO A  164   33.46662  54.19429  26.58635 H_     1 0  0.00000
ATOM    1215 HCG   PRO A  164   34.81574  53.25019  27.28324 H_     1 0  0.00000
ATOM    1216  CD   PRO A  164   32.89419  52.29765  27.51728 C_3    4 0  0.18000
ATOM    1217 HCD   PRO A  164   33.00380  52.46468  28.59036 H_     1 0  0.00000
ATOM    1218 HCD   PRO A  164   31.86503  52.52637  27.22679 H_     1 0  0.00000
ATOM    1219  N    LEU A  165   35.76084  49.52726  26.33305 N_R    3 0 -0.47000
ATOM    1220 HN    LEU A  165   35.66153  49.70827  27.27157 H___A  1 0  0.31000
ATOM    1221  CA   LEU A  165   36.82770  48.60075  26.03437 C_3    4 0  0.16000
ATOM    1222 HCA   LEU A  165   36.83001  48.31872  24.98041 H_     1 0  0.00000
ATOM    1223  C    LEU A  165   36.67185  47.30718  26.76182 C_R    3 0  0.51000
ATOM    1224  O    LEU A  165   37.60331  46.47079  26.66131 O_2    1 2 -0.51000
ATOM    1225  CB   LEU A  165   38.20030  49.27914  26.35507 C_3    4 0  0.00000
ATOM    1226 HCB   LEU A  165   39.00829  48.55477  26.20560 H_     1 0  0.00000
ATOM    1227 HCB   LEU A  165   38.20368  49.54501  27.41762 H_     1 0  0.00000
ATOM    1228  CG   LEU A  165   38.54598  50.54634  25.50589 C_3    4 0  0.00000
ATOM    1229 HCG   LEU A  165   37.71034  51.24925  25.56713 H_     1 0  0.00000
ATOM    1230  CD1  LEU A  165   39.78775  51.27284  26.09265 C_3    4 0  0.00000
ATOM    1231 HCD1  LEU A  165   40.66162  50.61844  26.07777 H_     1 0  0.00000
ATOM    1232 HCD1  LEU A  165   40.01334  52.16992  25.51463 H_     1 0  0.00000
ATOM    1233 HCD1  LEU A  165   39.59423  51.57503  27.12267 H_     1 0  0.00000
ATOM    1234  CD2  LEU A  165   38.78772  50.21779  24.00494 C_3    4 0  0.00000
ATOM    1235 HCD2  LEU A  165   37.89009  49.80745  23.54401 H_     1 0  0.00000
ATOM    1236 HCD2  LEU A  165   39.05384  51.11963  23.45451 H_     1 0  0.00000
ATOM    1237 HCD2  LEU A  165   39.59846  49.49551  23.89327 H_     1 0  0.00000
ATOM    1238  N    GLY A  166   35.55793  46.98479  27.46781 N_R    3 0 -0.47000
ATOM    1239 HN    GLY A  166   34.82391  47.60514  27.47102 H___A  1 0  0.31000
ATOM    1240  CA   GLY A  166   35.36049  45.75636  28.19098 C_3    4 0  0.16000
ATOM    1241 HCA   GLY A  166   36.13640  45.02112  27.96473 H_     1 0  0.00000
ATOM    1242 HCA   GLY A  166   34.41693  45.33428  27.84710 H_     1 0  0.00000
ATOM    1243  C    GLY A  166   35.30376  45.90117  29.66361 C_R    3 0  0.51000
ATOM    1244  O    GLY A  166   35.16777  44.86463  30.35335 O_2    1 2 -0.51000
ATOM    1245  N    GLU A  167   35.41992  47.10018  30.27994 N_R    3 0 -0.47000
ATOM    1246 HN    GLU A  167   35.58632  47.88170  29.76165 H___A  1 0  0.31000
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ATOM   1247  CA   GLU A  167   35.25687  47.35104  31.67968 C_3    4 0  0.16000
ATOM   1248 HCA   GLU A  167   35.80925  46.58375  32.23162 H_     1 0  0.00000
ATOM   1249  C    GLU A  167   33.83435  47.29081  32.12090 C_R    3 0  0.51000
ATOM   1250  O    GLU A  167   32.92079  47.18952  31.27303 O_2    1 2 -0.51000
ATOM   1251  CB   GLU A  167   35.92009  48.72841  32.01173 C_3    4 0  0.00000
ATOM   1252 HCB   GLU A  167   36.96178  48.71382  31.67794 H_     1 0  0.00000
ATOM   1253 HCB   GLU A  167   35.95364  48.81512  33.10257 H_     1 0  0.00000
ATOM   1254  CG   GLU A  167   35.24042  50.02767  31.46917 C_3    4 0 -0.10000
ATOM   1255 HCG   GLU A  167   35.62508  50.85923  32.06602 H_     1 0  0.00000
ATOM   1256 HCG   GLU A  167   34.16533  49.98251  31.65064 H_     1 0  0.00000
ATOM   1257  CD   GLU A  167   35.45952  50.40011  30.05092 C_R    3 0  0.62000
ATOM   1258  OE1  GLU A  167   35.95338  49.65137  29.18172 O_2    1 2 -0.76000
ATOM   1259  OE2  GLU A  167   35.12224  51.53026  29.64209 O_2    1 2 -0.76000
ATOM   1260  N    GLU A  168   33.52117  47.41263  33.42996 N_R    3 0 -0.47000
ATOM   1261 HN    GLU A  168   34.26389  47.45172  34.04833 H___A  1 0  0.31000
ATOM   1262  CA   GLU A  168   32.20066  47.52206  33.99007 C_3    4 0  0.16000
ATOM   1263 HCA   GLU A  168   31.45768  47.10534  33.30488 H_     1 0  0.00000
ATOM   1264  C    GLU A  168   31.89252  48.96416  34.19389 C_R    3 0  0.51000
ATOM   1265  O    GLU A  168   32.66531  49.63537  34.92242 O_2    1 2 -0.51000
ATOM   1266  CB   GLU A  168   32.12768  46.72935  35.33820 C_3    4 0  0.00000
ATOM   1267 HCB   GLU A  168   31.46192  47.25433  36.03183 H_     1 0  0.00000
ATOM   1268 HCB   GLU A  168   33.11035  46.69697  35.81939 H_     1 0  0.00000
ATOM   1269  CG   GLU A  168   31.56258  45.28757  35.22634 C_3    4 0 -0.10000
ATOM   1270 HCG   GLU A  168   30.56076  45.36370  34.80378 H_     1 0  0.00000
ATOM   1271 HCG   GLU A  168   31.46660  44.88582  36.23778 H_     1 0  0.00000
ATOM   1272  CD   GLU A  168   32.33763  44.29831  34.45159 C_R    3 0  0.62000
ATOM   1273  OE1  GLU A  168   33.51035  44.51529  34.07438 O_2    1 2 -0.76000
ATOM   1274  OE2  GLU A  168   31.84448  43.16256  34.25513 O_2    1 2 -0.76000
ATOM   1275  N    VAL A  169   30.79614  49.54359  33.63730 N_R    3 0 -0.47000
ATOM   1276 HN    VAL A  169   30.23555  48.97167  33.10528 H___A  1 0  0.31000
ATOM   1277  CA   VAL A  169   30.39754  50.92316  33.81859 C_3    4 0  0.16000
ATOM   1278 HCA   VAL A  169   31.17379  51.43261  34.40030 H_     1 0  0.00000
ATOM   1279  C    VAL A  169   29.14777  51.00210  34.63395 C_R    3 0  0.51000
ATOM   1280  O    VAL A  169   28.08618  50.47688  34.22628 O_2    1 2 -0.51000
ATOM   1281  CB   VAL A  169   30.35334  51.72424  32.47080 C_3    4 0  0.00000
ATOM   1282 HCB   VAL A  169   31.33187  51.59652  31.99436 H_     1 0  0.00000
ATOM   1283  CG1  VAL A  169   29.30325  51.21402  31.44878 C_3    4 0  0.00000
ATOM   1284 HCG1  VAL A  169   28.29573  51.35049  31.83085 H_     1 0  0.00000
ATOM   1285 HCG1  VAL A  169   29.37865  51.75881  30.51050 H_     1 0  0.00000
ATOM   1286 HCG1  VAL A  169   29.46773  50.16153  31.23325 H_     1 0  0.00000
ATOM   1287  CG2  VAL A  169   30.18184  53.25193  32.71734 C_3    4 0  0.00000
ATOM   1288 HCG2  VAL A  169   30.98980  53.62866  33.34706 H_     1 0  0.00000
ATOM   1289 HCG2  VAL A  169   30.21280  53.80043  31.77887 H_     1 0  0.00000
ATOM   1290 HCG2  VAL A  169   29.23034  53.46339  33.20643 H_     1 0  0.00000
ATOM   1291  N    GLU A  170   29.17561  51.64702  35.82422 N_R    3 0 -0.47000
ATOM   1292 HN    GLU A  170   30.02062  52.04390  36.07157 H___A  1 0  0.31000
ATOM   1293  CA   GLU A  170   28.08889  51.81127  36.75411 C_3    4 0  0.16000
ATOM   1294 HCA   GLU A  170   27.43147  50.93989  36.67022 H_     1 0  0.00000
ATOM   1295  C    GLU A  170   27.23138  53.00191  36.47734 C_R    3 0  0.51000
ATOM   1296  O    GLU A  170   27.50676  53.80906  35.55861 O_2    1 2 -0.51000
ATOM   1297  CB   GLU A  170   28.68937  51.86843  38.20779 C_3    4 0  0.00000
ATOM   1298 HCB   GLU A  170   28.26938  52.69633  38.78810 H_     1 0  0.00000
ATOM   1299 HCB   GLU A  170   29.76482  52.06749  38.16624 H_     1 0  0.00000
ATOM   1300  CG   GLU A  170   28.48065  50.56663  39.02848 C_3    4 0 -0.10000
ATOM   1301 HCG   GLU A  170   29.07082  50.63546  39.94643 H_     1 0  0.00000
ATOM   1302 HCG   GLU A  170   28.86666  49.72306  38.45008 H_     1 0  0.00000
ATOM   1303  CD   GLU A  170   27.08050  50.28924  39.42053 C_R    3 0  0.62000
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ATOM   1304  OE1 GLU A 170   26.15035  51.11183  39.24070 O_2    1 2 -0.76000
ATOM   1305  OE2 GLU A 170   26.80892  49.21013  39.98684 O_2    1 2 -0.76000
ATOM   1306  N   GLY A 171   26.15653  53.19931  37.27569 N_R    3 0 -0.47000
ATOM   1307 HN   GLY A 171   26.05112  52.52466  37.95342 H___A  1 0  0.31000
ATOM   1308  CA  GLY A 171   25.20801  54.27579  37.23454 C_3    4 0  0.16000
ATOM   1309 HCA  GLY A 171   25.45459  54.99745  36.45366 H_     1 0  0.00000
ATOM   1310 HCA  GLY A 171   25.26327  54.79131  38.19479 H_     1 0  0.00000
ATOM   1311  C   GLY A 171   23.81289  53.82467  37.02988 C_R    3 0  0.51000
ATOM   1312  O   GLY A 171   23.56676  52.60672  36.86570 O_2    1 2 -0.51000
ATOM   1313  N   ARG A 172   22.78842  54.71713  36.99409 N_R    3 0 -0.47000
ATOM   1314 HN   ARG A 172   23.00213  55.65790  37.09258 H___A  1 0  0.31000
ATOM   1315  CA  ARG A 172   21.40972  54.34616  36.79680 C_3    4 0  0.16000
ATOM   1316 HCA  ARG A 172   21.17093  53.58733  37.55135 H_     1 0  0.00000
ATOM   1317  C   ARG A 172   21.22286  53.73713  35.44646 C_R    3 0  0.51000
ATOM   1318  O   ARG A 172   21.42403  54.42347  34.41280 O_2    1 2 -0.51000
ATOM   1319  CB  ARG A 172   20.40692  55.51741  37.03370 C_3    4 0  0.00000
ATOM   1320 HCB  ARG A 172   19.40807  55.16401  36.76270 H_     1 0  0.00000
ATOM   1321 HCB  ARG A 172   20.65570  56.35072  36.37475 H_     1 0  0.00000
ATOM   1322  CG  ARG A 172   20.34477  56.02986  38.50376 C_3    4 0  0.00000
ATOM   1323 HCG  ARG A 172   21.25318  56.59603  38.72483 H_     1 0  0.00000
ATOM   1324 HCG  ARG A 172   20.32557  55.16633  39.17512 H_     1 0  0.00000
ATOM   1325  CD  ARG A 172   19.10022  56.90144  38.83586 C_3    4 0  0.38000
ATOM   1326 HCD  ARG A 172   19.09674  57.09111  39.91366 H_     1 0  0.00000
ATOM   1327 HCD  ARG A 172   18.18812  56.35074  38.58818 H_     1 0  0.00000
ATOM   1328  NE  ARG A 172   19.10181  58.15219  38.15341 N_R    3 0 -0.70000
ATOM   1329 HNE  ARG A 172   19.81248  58.34532  37.54533 H___A  1 0  0.44000
ATOM   1330  CZ  ARG A 172   18.24695  59.16727  38.28011 C_R    3 0  0.64000
ATOM   1331  NH1 ARG A 172   17.23631  59.20140  39.13406 N_R    3 0 -0.80000
ATOM   1332 HNH1 ARG A 172   16.66962  59.98402  39.15481 H___A  1 0  0.46000
ATOM   1333 HNH1 ARG A 172   17.07044  58.45167  39.71487 H___A  1 0  0.46000
ATOM   1334  NH2 ARG A 172   18.45193  60.21105  37.49375 N_R    3 0 -0.80000
ATOM   1335 HNH2 ARG A 172   17.96221  61.04292  37.56043 H___A  1 0  0.46000
ATOM   1336 HNH2 ARG A 172   19.10648  60.13986  36.79848 H___A  1 0  0.46000
ATOM   1337  N   LEU A 173   20.88261  52.42898  35.36477 N_R    3 0 -0.47000
ATOM   1338 HN   LEU A 173   20.79631  51.94859  36.20253 H___A  1 0  0.31000
ATOM   1339  CA  LEU A 173   20.62839  51.69212  34.16561 C_3    4 0  0.16000
ATOM   1340 HCA  LEU A 173   21.43668  51.89629  33.46507 H_     1 0  0.00000
ATOM   1341  C   LEU A 173   19.33360  52.09124  33.55338 C_R    3 0  0.51000
ATOM   1342  O   LEU A 173   18.29247  52.12464  34.25498 O_2    1 2 -0.51000
ATOM   1343  CB  LEU A 173   20.61828  50.15490  34.43419 C_3    4 0  0.00000
ATOM   1344 HCB  LEU A 173   20.43101  49.63749  33.48638 H_     1 0  0.00000
ATOM   1345 HCB  LEU A 173   19.77510  49.93415  35.09414 H_     1 0  0.00000
ATOM   1346  CG  LEU A 173   21.90477  49.54546  35.07963 C_3    4 0  0.00000
ATOM   1347 HCG  LEU A 173   22.10050  50.06669  36.02135 H_     1 0  0.00000
ATOM   1348  CD1 LEU A 173   21.67387  48.04629  35.42724 C_3    4 0  0.00000
ATOM   1349 HCD1 LEU A 173   21.43991  47.47405  34.52750 H_     1 0  0.00000
ATOM   1350 HCD1 LEU A 173   22.56352  47.61784  35.89114 H_     1 0  0.00000
ATOM   1351 HCD1 LEU A 173   20.84568  47.94205  36.13024 H_     1 0  0.00000
ATOM   1352  CD2 LEU A 173   23.16464  49.69618  34.18475 C_3    4 0  0.00000
ATOM   1353 HCD2 LEU A 173   23.40309  50.74746  34.02160 H_     1 0  0.00000
ATOM   1354 HCD2 LEU A 173   24.03014  49.23528  34.66347 H_     1 0  0.00000
ATOM   1355 HCD2 LEU A 173   23.00235  49.21594  33.21859 H_     1 0  0.00000
ATOM   1356  N   LEU A 174   19.28118  52.37842  32.23455 N_R    3 0 -0.47000
ATOM   1357 HN   LEU A 174   20.11810  52.34581  31.76734 H___A  1 0  0.31000
ATOM   1358  CA  LEU A 174   18.08665  52.68684  31.49300 C_3    4 0  0.16000
ATOM   1359 HCA  LEU A 174   17.25064  52.19667  31.99997 H_     1 0  0.00000
ATOM   1360  C   LEU A 174   18.10938  52.10138  30.12924 C_R    3 0  0.51000
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ATOM   1361  O    LEU A  174   19.19702  51.76727  29.60349 O_2    1 2 -0.51000
ATOM   1362  CB   LEU A  174   17.79713  54.22598  31.49505 C_3    4 0  0.00000
ATOM   1363 HCB   LEU A  174   18.00010  54.60271  32.49812 H_     1 0  0.00000
ATOM   1364 HCB   LEU A  174   16.72943  54.36903  31.32336 H_     1 0  0.00000
ATOM   1365  CG   LEU A  174   18.54689  55.13126  30.46718 C_3    4 0  0.00000
ATOM   1366 HCG   LEU A  174   18.29579  54.79589  29.45695 H_     1 0  0.00000
ATOM   1367  CD1  LEU A  174   18.07173  56.60560  30.58077 C_3    4 0  0.00000
ATOM   1368 HCD1  LEU A  174   18.28413  57.00282  31.57447 H_     1 0  0.00000
ATOM   1369 HCD1  LEU A  174   18.57864  57.22704  29.84158 H_     1 0  0.00000
ATOM   1370 HCD1  LEU A  174   16.99905  56.67245  30.39748 H_     1 0  0.00000
ATOM   1371  CD2  LEU A  174   20.08298  55.06054  30.62009 C_3    4 0  0.00000
ATOM   1372 HCD2  LEU A  174   20.42939  54.06771  30.36400 H_     1 0  0.00000
ATOM   1373 HCD2  LEU A  174   20.57044  55.75203  29.94048 H_     1 0  0.00000
ATOM   1374 HCD2  LEU A  174   20.38070  55.29691  31.64165 H_     1 0  0.00000
ATOM   1375  N    LEU A  175   16.95908  51.96781  29.43125 N_R    3 0 -0.47000
ATOM   1376 HN    LEU A  175   16.15767  52.21384  29.90753 H___A  1 0  0.31000
ATOM   1377  CA   LEU A  175   16.92206  51.62552  28.02825 C_3    4 0  0.16000
ATOM   1378 HCA   LEU A  175   17.69429  50.88607  27.81247 H_     1 0  0.00000
ATOM   1379  C    LEU A  175   17.22682  52.84482  27.23434 C_R    3 0  0.51000
ATOM   1380  O    LEU A  175   16.52124  53.86560  27.42183 O_2    1 2 -0.51000
ATOM   1381  CB   LEU A  175   15.56692  50.99854  27.59678 C_3    4 0  0.00000
ATOM   1382 HCB   LEU A  175   15.52619  50.98434  26.50834 H_     1 0  0.00000
ATOM   1383 HCB   LEU A  175   14.76575  51.65323  27.94488 H_     1 0  0.00000
ATOM   1384  CG   LEU A  175   15.31478  49.53829  28.08374 C_3    4 0  0.00000
ATOM   1385 HCG   LEU A  175   15.63185  49.47189  29.12394 H_     1 0  0.00000
ATOM   1386  CD1  LEU A  175   13.80144  49.18571  28.02725 C_3    4 0  0.00000
ATOM   1387 HCD1  LEU A  175   13.42486  49.26594  27.00670 H_     1 0  0.00000
ATOM   1388 HCD1  LEU A  175   13.63164  48.16856  28.38307 H_     1 0  0.00000
ATOM   1389 HCD1  LEU A  175   13.22828  49.86141  28.66194 H_     1 0  0.00000
ATOM   1390  CD2  LEU A  175   16.13085  48.48791  27.27756 C_3    4 0  0.00000
ATOM   1391 HCD2  LEU A  175   17.20025  48.67650  27.35899 H_     1 0  0.00000
ATOM   1392 HCD2  LEU A  175   15.94151  47.48476  27.66237 H_     1 0  0.00000
ATOM   1393 HCD2  LEU A  175   15.85576  48.51219  26.22165 H_     1 0  0.00000
ATOM   1394  N    ARG A  176   18.26289  52.87291  26.35557 N_R    3 0 -0.47000
ATOM   1395 HN    ARG A  176   18.76935  52.06638  26.23161 H___A  1 0  0.31000
ATOM   1396  CA   ARG A  176   18.71604  54.04805  25.65626 C_3    4 0  0.16000
ATOM   1397 HCA   ARG A  176   19.15711  54.68086  26.42885 H_     1 0  0.00000
ATOM   1398  C    ARG A  176   17.63555  54.82057  24.97847 C_R    3 0  0.51000
ATOM   1399  O    ARG A  176   16.84409  54.20976  24.22285 O_2    1 2 -0.51000
ATOM   1400  CB   ARG A  176   19.87207  53.71900  24.66699 C_3    4 0  0.00000
ATOM   1401 HCB   ARG A  176   20.68302  53.24612  25.22626 H_     1 0  0.00000
ATOM   1402 HCB   ARG A  176   20.26358  54.65953  24.26707 H_     1 0  0.00000
ATOM   1403  CG   ARG A  176   19.49044  52.79217  23.47742 C_3    4 0  0.00000
ATOM   1404 HCG   ARG A  176   18.66794  53.22984  22.92047 H_     1 0  0.00000
ATOM   1405 HCG   ARG A  176   19.14854  51.83090  23.85924 H_     1 0  0.00000
ATOM   1406  CD   ARG A  176   20.65356  52.58281  22.48562 C_3    4 0  0.38000
ATOM   1407 HCD   ARG A  176   21.52826  52.21451  23.02202 H_     1 0  0.00000
ATOM   1408 HCD   ARG A  176   20.91533  53.54146  22.03074 H_     1 0  0.00000
ATOM   1409  NE   ARG A  176   20.25083  51.69869  21.43961 N_R    3 0 -0.70000
ATOM   1410 HNE   ARG A  176   19.36334  51.75219  21.09368 H___A  1 0  0.44000
ATOM   1411  CZ   ARG A  176   20.96595  50.74693  20.84986 C_R    3 0  0.64000
ATOM   1412  NH1  ARG A  176   22.14527  50.33909  21.27078 N_R    3 0 -0.80000
ATOM   1413 HNH1  ARG A  176   22.66673  49.66897  20.83744 H___A  1 0  0.46000
ATOM   1414 HNH1  ARG A  176   22.43732  50.59955  22.14049 H___A  1 0  0.46000
ATOM   1415  NH2  ARG A  176   20.36973  50.15431  19.83451 N_R    3 0 -0.80000
ATOM   1416 HNH2  ARG A  176   20.79387  49.44747  19.32943 H___A  1 0  0.46000
ATOM   1417 HNH2  ARG A  176   19.46589  50.42712  19.67867 H___A  1 0  0.46000
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ATOM   1418  N    THR A  177   17.50729  56.15711  25.16629 N_R    3 0 -0.47000
ATOM   1419 HN    THR A  177   18.16218  56.55607  25.74883 H___A  1 0  0.31000
ATOM   1420  CA   THR A  177   16.46079  56.96775  24.56674 C_3    4 0  0.16000
ATOM   1421 HCA   THR A  177   15.73208  56.30826  24.09754 H_     1 0  0.00000
ATOM   1422  C    THR A  177   16.89382  57.79763  23.41936 C_R    3 0  0.51000
ATOM   1423  O    THR A  177   16.05420  58.48311  22.78877 O_2    1 2 -0.51000
ATOM   1424  CB   THR A  177   15.67385  57.75735  25.64857 C_3    4 0  0.23000
ATOM   1425 HCB   THR A  177   15.44956  57.06936  26.47180 H_     1 0  0.00000
ATOM   1426  OG1  THR A  177   14.40625  58.15939  25.11236 O_3    2 2 -0.66000
ATOM   1427 HOG1  THR A  177   14.01027  57.27216  25.02768 H___A  1 0  0.43000
ATOM   1428  CG2  THR A  177   16.45417  58.93869  26.25661 C_3    4 0  0.00000
ATOM   1429 HCG2  THR A  177   16.58865  59.73943  25.52727 H_     1 0  0.00000
ATOM   1430 HCG2  THR A  177   15.90650  59.30727  27.11919 H_     1 0  0.00000
ATOM   1431 HCG2  THR A  177   17.42692  58.60514  26.60737 H_     1 0  0.00000
ATOM   1432  N    HSD A  178   18.17052  57.71890  22.99559 N_R    3 0 -0.47000
ATOM   1433 HN    HSD A  178   18.78131  57.23076  23.56732 H___A  1 0  0.31000
ATOM   1434  CA   HSD A  178   18.69196  58.20599  21.75419 C_3    4 0  0.16000
ATOM   1435 HCA   HSD A  178   17.97790  57.90520  20.98235 H_     1 0  0.00000
ATOM   1436  C    HSD A  178   19.97001  57.51508  21.42077 C_R    3 0  0.51000
ATOM   1437  O    HSD A  178   20.59728  56.89982  22.31544 O_2    1 2 -0.51000
ATOM   1438  CB   HSD A  178   18.79195  59.75622  21.68728 C_3    4 0  0.10000
ATOM   1439 HCB   HSD A  178   17.77692  60.15757  21.66328 H_     1 0  0.00000
ATOM   1440 HCB   HSD A  178   19.25639  60.01571  20.73567 H_     1 0  0.00000
ATOM   1441  CG   HSD A  178   19.51679  60.47995  22.75836 C_R    3 0  0.22000
ATOM   1442  ND1  HSD A  178   19.57263  61.82214  22.83069 N_R    2 1 -0.70000
ATOM   1443  CD2  HSD A  178   20.25653  59.98937  23.83141 C_R    3 0  0.04000
ATOM   1444 HCD2  HSD A  178   20.41090  59.00988  24.06181 H_     1 0  0.00000
ATOM   1445  CE1  HSD A  178   20.31858  62.14784  23.90063 C_R    3 0  0.38000
ATOM   1446 HCE1  HSD A  178   20.52983  63.10180  24.19303 H_     1 0  0.00000
ATOM   1447  NE2  HSD A  178   20.74363  61.03515  24.51523 N_R    3 0 -0.36000
ATOM   1448 HNE2  HSD A  178   21.29485  60.99489  25.30881 H___A  1 0  0.32000
ATOM   1449  N    THR A  179   20.43721  57.48940  20.15007 N_R    3 0 -0.47000
ATOM   1450 HN    THR A  179   19.86907  57.90785  19.49037 H___A  1 0  0.31000
ATOM   1451  CA   THR A  179   21.66818  56.83849  19.73972 C_3    4 0  0.16000
ATOM   1452 HCA   THR A  179   21.65239  55.84261  20.19705 H_     1 0  0.00000
ATOM   1453  C    THR A  179   22.88808  57.52082  20.27826 C_R    3 0  0.51000
ATOM   1454  O    THR A  179   23.76514  56.82444  20.84914 O_2    1 2 -0.51000
ATOM   1455  CB   THR A  179   21.73460  56.60715  18.19468 C_3    4 0  0.23000
ATOM   1456 HCB   THR A  179   22.76714  56.71042  17.84641 H_     1 0  0.00000
ATOM   1457  OG1  THR A  179   20.91618  57.53585  17.48524 O_3    2 2 -0.66000
ATOM   1458 HOG1  THR A  179   21.37594  58.38694  17.54239 H___A  1 0  0.43000
ATOM   1459  CG2  THR A  179   21.26373  55.20159  17.75299 C_3    4 0  0.00000
ATOM   1460 HCG2  THR A  179   20.23009  55.03438  18.05561 H_     1 0  0.00000
ATOM   1461 HCG2  THR A  179   21.33280  55.10698  16.66686 H_     1 0  0.00000
ATOM   1462 HCG2  THR A  179   21.89418  54.43514  18.20564 H_     1 0  0.00000
ATOM   1463  N    SER A  180   23.05757  58.86252  20.16495 N_R    3 0 -0.47000
ATOM   1464 HN    SER A  180   22.61013  59.27300  19.41745 H___A  1 0  0.31000
ATOM   1465  CA   SER A  180   23.91989  59.76203  20.90955 C_3    4 0  0.16000
ATOM   1466 HCA   SER A  180   24.48473  60.23824  20.10464 H_     1 0  0.00000
ATOM   1467  C    SER A  180   24.92390  59.18461  21.86922 C_R    3 0  0.51000
ATOM   1468  O    SER A  180   26.12244  59.39484  21.57525 O_2    1 2 -0.51000
ATOM   1469  CB   SER A  180   23.14793  60.94181  21.57450 C_3    4 0  0.23000
ATOM   1470 HCB   SER A  180   23.81812  61.79568  21.69913 H_     1 0  0.00000
ATOM   1471 HCB   SER A  180   22.78045  60.67617  22.56150 H_     1 0  0.00000
ATOM   1472  OG   SER A  180   22.02794  61.38076  20.81133 O_3    2 2 -0.66000
ATOM   1473 HOG   SER A  180   21.43342  60.60353  20.77498 H___A  1 0  0.43000
ATOM   1474  N    PRO A  181   24.68190  58.43713  22.99713 N_R    3 0 -0.29000
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ATOM   1475  CA   PRO A  181   25.69409  57.73566  23.76959 C_3    4 0  0.11000
ATOM   1476 HCA   PRO A  181   26.13072  58.46148  24.46538 H_     1 0  0.00000
ATOM   1477  C    PRO A  181   26.77259  57.09435  23.01480 C_2    3 0  0.51000
ATOM   1478  O    PRO A  181   27.93941  57.18923  23.39595 O_2    1 2 -0.51000
ATOM   1479  CB   PRO A  181   24.90297  56.67200  24.58722 C_3    4 0  0.00000
ATOM   1480 HCB   PRO A  181   24.97720  56.88011  25.65348 H_     1 0  0.00000
ATOM   1481 HCB   PRO A  181   25.24246  55.64492  24.42014 H_     1 0  0.00000
ATOM   1482  CG   PRO A  181   23.44168  56.81594  24.14397 C_3    4 0  0.00000
ATOM   1483 HCG   PRO A  181   22.74076  56.67911  24.97092 H_     1 0  0.00000
ATOM   1484 HCG   PRO A  181   23.21187  56.08805  23.36121 H_     1 0  0.00000
ATOM   1485  CD   PRO A  181   23.39419  58.24059  23.58121 C_3    4 0  0.18000
ATOM   1486 HCD   PRO A  181   22.57301  58.34126  22.87962 H_     1 0  0.00000
ATOM   1487 HCD   PRO A  181   23.25322  58.96390  24.38875 H_     1 0  0.00000
ATOM   1488  N    MET A  182   26.48972  56.44976  21.89283 N_R    3 0 -0.47000
ATOM   1489 HN    MET A  182   25.58368  56.50420  21.57242 H___A  1 0  0.31000
ATOM   1490  CA   MET A  182   27.45675  55.73856  21.09969 C_3    4 0  0.16000
ATOM   1491 HCA   MET A  182   27.94822  55.05786  21.79655 H_     1 0  0.00000
ATOM   1492  C    MET A  182   28.50316  56.63374  20.51822 C_R    3 0  0.51000
ATOM   1493  O    MET A  182   29.62416  56.14081  20.24137 O_2    1 2 -0.51000
ATOM   1494  CB   MET A  182   26.74690  54.85221  20.03622 C_3    4 0  0.00000
ATOM   1495 HCB   MET A  182   26.23470  55.50759  19.32760 H_     1 0  0.00000
ATOM   1496 HCB   MET A  182   25.97964  54.24991  20.53186 H_     1 0  0.00000
ATOM   1497  CG   MET A  182   27.67799  53.88731  19.24861 C_3    4 0  0.04000
ATOM   1498 HCG   MET A  182   28.41326  54.46760  18.68977 H_     1 0  0.00000
ATOM   1499 HCG   MET A  182   27.08469  53.32513  18.52793 H_     1 0  0.00000
ATOM   1500  SD   MET A  182   28.51581  52.68135  20.31123 S_3    2 0 -0.09000
ATOM   1501  CE   MET A  182   29.75605  52.12834  19.12095 C_3    4 0  0.05000
ATOM   1502 HCE   MET A  182   30.42219  52.95131  18.87001 H_     1 0  0.00000
ATOM   1503 HCE   MET A  182   30.34206  51.32523  19.56748 H_     1 0  0.00000
ATOM   1504 HCE   MET A  182   29.27763  51.76448  18.21262 H_     1 0  0.00000
ATOM   1505  N    GLN A  183   28.32495  57.97718  20.41635 N_R    3 0 -0.47000
ATOM   1506 HN    GLN A  183   27.50419  58.35566  20.72908 H___A  1 0  0.31000
ATOM   1507  CA   GLN A  183   29.33466  58.93127  20.05401 C_3    4 0  0.16000
ATOM   1508 HCA   GLN A  183   29.70044  58.68792  19.05284 H_     1 0  0.00000
ATOM   1509  C    GLN A  183   30.43090  58.89730  21.02202 C_2    3 0  0.51000
ATOM   1510  O    GLN A  183   31.59818  58.84687  20.65029 O_2    1 2 -0.51000
ATOM   1511  CB   GLN A  183   28.77733  60.39299  20.06012 C_3    4 0  0.00000
ATOM   1512 HCB   GLN A  183   29.62805  61.06107  19.90884 H_     1 0  0.00000
ATOM   1513 HCB   GLN A  183   28.37050  60.62089  21.05062 H_     1 0  0.00000
ATOM   1514  CG   GLN A  183   27.70571  60.78172  19.00043 C_3    4 0  0.00000
ATOM   1515 HCG   GLN A  183   26.80551  60.18543  19.14910 H_     1 0  0.00000
ATOM   1516 HCG   GLN A  183   28.07557  60.56604  17.99932 H_     1 0  0.00000
ATOM   1517  CD   GLN A  183   27.37478  62.22928  19.07457 C_R    3 0  0.55000
ATOM   1518  OE1  GLN A  183   28.23650  63.09453  19.34864 O_2    1 2 -0.55000
ATOM   1519  NE2  GLN A  183   26.16511  62.73994  18.83100 N_R    3 0 -0.60000
ATOM   1520 HNE2  GLN A  183   26.03872  63.69182  18.93546 H___A  1 0  0.30000
ATOM   1521 HNE2  GLN A  183   25.43072  62.20795  18.52768 H___A  1 0  0.30000
ATOM   1522  N    VAL A  184   30.12127  58.90083  22.31005 N_R    3 0 -0.47000
ATOM   1523 HN    VAL A  184   29.21399  58.67894  22.54268 H___A  1 0  0.31000
ATOM   1524  CA   VAL A  184   31.02119  59.02668  23.41227 C_3    4 0  0.16000
ATOM   1525 HCA   VAL A  184   31.70916  59.85584  23.20793 H_     1 0  0.00000
ATOM   1526  C    VAL A  184   31.76783  57.74876  23.49071 C_R    3 0  0.51000
ATOM   1527  O    VAL A  184   33.01563  57.78722  23.45173 O_2    1 2 -0.51000
ATOM   1528  CB   VAL A  184   30.26088  59.34565  24.74421 C_3    4 0  0.00000
ATOM   1529 HCB   VAL A  184   29.67993  58.46429  25.03009 H_     1 0  0.00000
ATOM   1530  CG1  VAL A  184   31.23980  59.65720  25.91072 C_3    4 0  0.00000
ATOM   1531 HCG1  VAL A  184   31.76620  60.59256  25.73386 H_     1 0  0.00000
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ATOM   1532 HCG1 VAL A 184   30.69253  59.75151  26.84602 H_     1 0  0.00000
ATOM   1533 HCG1 VAL A 184   31.97342  58.86121  26.02805 H_     1 0  0.00000
ATOM   1534  CG2 VAL A 184   29.25429  60.51953  24.59473 C_3    4 0  0.00000
ATOM   1535 HCG2 VAL A 184   28.48324  60.27171  23.86391 H_     1 0  0.00000
ATOM   1536 HCG2 VAL A 184   28.75599  60.71880  25.54543 H_     1 0  0.00000
ATOM   1537 HCG2 VAL A 184   29.76797  61.42666  24.26944 H_     1 0  0.00000
ATOM   1538  N   ARG A 185   31.09253  56.57022  23.48839 N_R    3 0 -0.47000
ATOM   1539 HN   ARG A 185   30.12729  56.63278  23.49408 H___A  1 0  0.31000
ATOM   1540  CA  ARG A 185   31.72516  55.27756  23.44376 C_3    4 0  0.16000
ATOM   1541 HCA  ARG A 185   32.26313  55.14837  24.38820 H_     1 0  0.00000
ATOM   1542  C   ARG A 185   32.70181  55.16070  22.31674 C_R    3 0  0.51000
ATOM   1543  O   ARG A 185   33.89895  54.86317  22.57213 O_2    1 2 -0.51000
ATOM   1544  CB  ARG A 185   30.67787  54.13528  23.33790 C_3    4 0  0.00000
ATOM   1545 HCB  ARG A 185   31.20441  53.19070  23.16442 H_     1 0  0.00000
ATOM   1546 HCB  ARG A 185   30.04296  54.31730  22.47154 H_     1 0  0.00000
ATOM   1547  CG  ARG A 185   29.78925  53.95211  24.59907 C_3    4 0  0.00000
ATOM   1548 HCG  ARG A 185   29.24096  54.87452  24.80798 H_     1 0  0.00000
ATOM   1549 HCG  ARG A 185   30.43672  53.74158  25.45401 H_     1 0  0.00000
ATOM   1550  CD  ARG A 185   28.78044  52.78767  24.42432 C_3    4 0  0.38000
ATOM   1551 HCD  ARG A 185   29.27711  51.92101  23.97883 H_     1 0  0.00000
ATOM   1552 HCD  ARG A 185   27.98952  53.09456  23.73611 H_     1 0  0.00000
ATOM   1553  NE  ARG A 185   28.16834  52.42923  25.65716 N_R    3 0 -0.70000
ATOM   1554 HNE  ARG A 185   27.39088  52.91484  25.93205 H___A  1 0  0.44000
ATOM   1555  CZ  ARG A 185   28.53677  51.44111  26.46874 C_R    3 0  0.64000
ATOM   1556  NH1 ARG A 185   29.52875  50.59011  26.26575 N_R    3 0 -0.80000
ATOM   1557 HNH1 ARG A 185   29.62681  49.91901  26.93825 H___A  1 0  0.46000
ATOM   1558 HNH1 ARG A 185   30.10035  50.63164  25.49187 H___A  1 0  0.46000
ATOM   1559  NH2 ARG A 185   27.87622  51.22184  27.58834 N_R    3 0 -0.80000
ATOM   1560 HNH2 ARG A 185   28.16805  50.46981  28.11074 H___A  1 0  0.46000
ATOM   1561 HNH2 ARG A 185   27.14686  51.79234  27.84759 H___A  1 0  0.46000
ATOM   1562  N   TYR A 186   32.32561  55.42088  21.03438 N_R    3 0 -0.47000
ATOM   1563 HN   TYR A 186   31.41485  55.65790  20.84662 H___A  1 0  0.31000
ATOM   1564  CA  TYR A 186   33.22132  55.35964  19.91512 C_3    4 0  0.16000
ATOM   1565 HCA  TYR A 186   33.58491  54.32527  19.88499 H_     1 0  0.00000
ATOM   1566  C   TYR A 186   34.37926  56.28042  20.08327 C_R    3 0  0.51000
ATOM   1567  O   TYR A 186   35.53063  55.80853  19.94279 O_2    1 2 -0.51000
ATOM   1568  CB  TYR A 186   32.50931  55.62582  18.55615 C_3    4 0  0.00000
ATOM   1569 HCB  TYR A 186   32.18745  56.66921  18.49397 H_     1 0  0.00000
ATOM   1570 HCB  TYR A 186   31.60512  55.01871  18.48960 H_     1 0  0.00000
ATOM   1571  CG  TYR A 186   33.42147  55.28750  17.42646 C_R    3 0  0.00000
ATOM   1572  CD1 TYR A 186   33.48724  53.96903  16.91699 C_R    3 0  0.00000
ATOM   1573 HCD1 TYR A 186   32.85971  53.24379  17.27827 H_     1 0  0.00000
ATOM   1574  CD2 TYR A 186   34.31896  56.25579  16.91938 C_R    3 0  0.00000
ATOM   1575 HCD2 TYR A 186   34.29145  57.21708  17.26793 H_     1 0  0.00000
ATOM   1576  CE1 TYR A 186   34.43379  53.62792  15.93031 C_R    3 0  0.00000
ATOM   1577 HCE1 TYR A 186   34.46278  52.67325  15.56573 H_     1 0  0.00000
ATOM   1578  CE2 TYR A 186   35.28072  55.90605  15.95467 C_R    3 0  0.00000
ATOM   1579 HCE2 TYR A 186   35.93368  56.60874  15.61248 H_     1 0  0.00000
ATOM   1580  CZ  TYR A 186   35.33630  54.59600  15.44968 C_R    3 0  0.11000
ATOM   1581  OH  TYR A 186   36.22263  54.29004  14.47506 O_R    2 2 -0.54000
ATOM   1582 HOH  TYR A 186   36.24400  53.39011  14.09726 H___A  1 0  0.43000
ATOM   1583  N   MET A 187   34.23667  57.59746  20.38299 N_R    3 0 -0.47000
ATOM   1584 HN   MET A 187   33.35154  57.96358  20.47069 H___A  1 0  0.31000
ATOM   1585  CA  MET A 187   35.35921  58.47586  20.58771 C_3    4 0  0.16000
ATOM   1586 HCA  MET A 187   35.91006  58.51631  19.64113 H_     1 0  0.00000
ATOM   1587  C   MET A 187   36.28449  57.95952  21.63925 C_R    3 0  0.51000
ATOM   1588  O   MET A 187   37.48502  57.74297  21.33161 O_2    1 2 -0.51000
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ATOM   1589  CB   MET A  187   34.90432  59.92275  20.92266 C_3    4 0  0.00000
ATOM   1590 HCB   MET A  187   35.77619  60.46855  21.27633 H_     1 0  0.00000
ATOM   1591 HCB   MET A  187   34.15705  59.90722  21.72061 H_     1 0  0.00000
ATOM   1592  CG   MET A  187   34.37266  60.71099  19.70494 C_3    4 0  0.04000
ATOM   1593 HCG   MET A  187   33.47171  60.24712  19.30393 H_     1 0  0.00000
ATOM   1594 HCG   MET A  187   35.14074  60.69559  18.93402 H_     1 0  0.00000
ATOM   1595  SD   MET A  187   34.09789  62.45966  20.08545 S_3    2 0 -0.09000
ATOM   1596  CE   MET A  187   32.38330  62.37761  20.63694 C_3    4 0  0.05000
ATOM   1597 HCE   MET A  187   32.28133  61.69512  21.47924 H_     1 0  0.00000
ATOM   1598 HCE   MET A  187   32.06278  63.37326  20.94155 H_     1 0  0.00000
ATOM   1599 HCE   MET A  187   31.75755  62.04409  19.81238 H_     1 0  0.00000
ATOM   1600  N    VAL A  188   35.82140  57.63335  22.87373 N_R    3 0 -0.47000
ATOM   1601 HN    VAL A  188   34.88578  57.73699  23.03816 H___A  1 0  0.31000
ATOM   1602  CA   VAL A  188   36.59994  57.08308  23.95311 C_3    4 0  0.16000
ATOM   1603 HCA   VAL A  188   37.26841  57.87671  24.29527 H_     1 0  0.00000
ATOM   1604  C    VAL A  188   37.42532  55.94663  23.47215 C_R    3 0  0.51000
ATOM   1605  O    VAL A  188   38.65077  55.96332  23.72724 O_2    1 2 -0.51000
ATOM   1606  CB   VAL A  188   35.70262  56.66918  25.17243 C_3    4 0  0.00000
ATOM   1607 HCB   VAL A  188   34.85843  56.08694  24.79178 H_     1 0  0.00000
ATOM   1608  CG1  VAL A  188   36.43402  55.76659  26.21300 C_3    4 0  0.00000
ATOM   1609 HCG1  VAL A  188   37.30094  56.28020  26.63140 H_     1 0  0.00000
ATOM   1610 HCG1  VAL A  188   35.75791  55.50168  27.01947 H_     1 0  0.00000
ATOM   1611 HCG1  VAL A  188   36.76457  54.82991  25.76384 H_     1 0  0.00000
ATOM   1612  CG2  VAL A  188   35.12298  57.91286  25.90636 C_3    4 0  0.00000
ATOM   1613 HCG2  VAL A  188   34.60788  58.57215  25.21368 H_     1 0  0.00000
ATOM   1614 HCG2  VAL A  188   34.40531  57.60607  26.66840 H_     1 0  0.00000
ATOM   1615 HCG2  VAL A  188   35.91997  58.48468  26.38376 H_     1 0  0.00000
ATOM   1616  N    ALA A  189   36.86626  54.93354  22.77497 N_R    3 0 -0.47000
ATOM   1617 HN    ALA A  189   35.91074  54.94805  22.65039 H___A  1 0  0.31000
ATOM   1618  CA   ALA A  189   37.59407  53.80569  22.27337 C_3    4 0  0.16000
ATOM   1619 HCA   ALA A  189   38.16399  53.40134  23.11690 H_     1 0  0.00000
ATOM   1620  C    ALA A  189   38.56734  54.03266  21.15309 C_R    3 0  0.51000
ATOM   1621  O    ALA A  189   39.29860  53.04813  20.88154 O_2    1 2 -0.51000
ATOM   1622  CB   ALA A  189   36.54804  52.72731  21.88748 C_3    4 0  0.00000
ATOM   1623 HCB   ALA A  189   35.86738  53.10993  21.12663 H_     1 0  0.00000
ATOM   1624 HCB   ALA A  189   37.03135  51.82553  21.50610 H_     1 0  0.00000
ATOM   1625 HCB   ALA A  189   35.95904  52.44466  22.76018 H_     1 0  0.00000
ATOM   1626  N    HSD A  190   38.71392  55.17496  20.41353 N_R    3 0 -0.47000
ATOM   1627 HN    HSD A  190   38.23198  55.96153  20.69250 H___A  1 0  0.31000
ATOM   1628  CA   HSD A  190   39.50586  55.24620  19.18581 C_3    4 0  0.16000
ATOM   1629 HCA   HSD A  190   40.16046  54.37182  19.10834 H_     1 0  0.00000
ATOM   1630  C    HSD A  190   40.48833  56.37554  19.14045 C_R    3 0  0.51000
ATOM   1631  O    HSD A  190   41.33383  56.43016  20.06134 O_2    1 2 -0.51000
ATOM   1632  CB   HSD A  190   38.57672  55.15246  17.93533 C_3    4 0  0.10000
ATOM   1633 HCB   HSD A  190   39.18269  55.21762  17.02671 H_     1 0  0.00000
ATOM   1634 HCB   HSD A  190   37.87539  55.99042  17.92679 H_     1 0  0.00000
ATOM   1635  CG   HSD A  190   37.82250  53.88091  17.87511 C_R    3 0  0.22000
ATOM   1636  ND1  HSD A  190   36.68451  53.62042  18.53567 N_R    2 1 -0.70000
ATOM   1637  CD2  HSD A  190   38.15154  52.73393  17.15750 C_R    3 0  0.04000
ATOM   1638 HCD2  HSD A  190   38.96123  52.60466  16.54998 H_     1 0  0.00000
ATOM   1639  CE1  HSD A  190   36.32447  52.35938  18.26169 C_R    3 0  0.38000
ATOM   1640 HCE1  HSD A  190   35.49714  51.89079  18.63282 H_     1 0  0.00000
ATOM   1641  NE2  HSD A  190   37.21127  51.81886  17.41907 N_R    3 0 -0.36000
ATOM   1642 HNE2  HSD A  190   37.17346  50.91800  17.07065 H___A  1 0  0.32000
ATOM   1643  N    THR A  191   40.57756  57.24884  18.09891 N_R    3 0 -0.47000
ATOM   1644 HN    THR A  191   39.89509  57.14482  17.42033 H___A  1 0  0.31000
ATOM   1645  CA   THR A  191   41.57781  58.27111  17.81807 C_3    4 0  0.16000
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ATOM    1646 HCA   THR A  191   41.65887  58.90730  18.70131 H_     1 0  0.00000
ATOM    1647  C    THR A  191   41.09142  59.07779  16.64535 C_R    3 0  0.51000
ATOM    1648  O    THR A  191   40.72943  58.41571  15.64178 O_2    1 2 -0.51000
ATOM    1649  CB   THR A  191   43.00512  57.67429  17.51268 C_3    4 0  0.23000
ATOM    1650 HCB   THR A  191   42.88336  56.78308  16.88921 H_     1 0  0.00000
ATOM    1651  OG1  THR A  191   43.65609  57.27075  18.71833 O_3    2 2 -0.66000
ATOM    1652 HOG1  THR A  191   42.91941  56.91600  19.21835 H___A  1 0  0.43000
ATOM    1653  CG2  THR A  191   44.02579  58.60978  16.81246 C_3    4 0  0.00000
ATOM    1654 HCG2  THR A  191   44.17925  59.51497  17.39983 H_     1 0  0.00000
ATOM    1655 HCG2  THR A  191   44.98614  58.10263  16.70381 H_     1 0  0.00000
ATOM    1656 HCG2  THR A  191   43.67986  58.87940  15.81645 H_     1 0  0.00000
ATOM    1657  N    PRO A  192   41.03792  60.44652  16.55780 N_R    3 0 -0.29000
ATOM    1658  CA   PRO A  192   40.61590  61.15780  15.36412 C_3    4 0  0.11000
ATOM    1659 HCA   PRO A  192   39.70434  60.70134  14.97538 H_     1 0  0.00000
ATOM    1660  C    PRO A  192   41.62587  61.21340  14.28977 C_2    3 0  0.51000
ATOM    1661  O    PRO A  192   42.79454  61.07764  14.63641 O_2    1 2 -0.51000
ATOM    1662  CB   PRO A  192   40.26407  62.56574  15.90155 C_3    4 0  0.00000
ATOM    1663 HCB   PRO A  192   39.22943  62.57656  16.25495 H_     1 0  0.00000
ATOM    1664 HCB   PRO A  192   40.38600  63.36024  15.15995 H_     1 0  0.00000
ATOM    1665  CG   PRO A  192   41.21225  62.76115  17.09128 C_3    4 0  0.00000
ATOM    1666 HCG   PRO A  192   40.77104  63.40297  17.85892 H_     1 0  0.00000
ATOM    1667 HCG   PRO A  192   42.15377  63.20276  16.75156 H_     1 0  0.00000
ATOM    1668  CD   PRO A  192   41.45173  61.33140  17.60464 C_3    4 0  0.18000
ATOM    1669 HCD   PRO A  192   42.50887  61.19374  17.83791 H_     1 0  0.00000
ATOM    1670 HCD   PRO A  192   40.86343  61.16177  18.50466 H_     1 0  0.00000
ATOM    1671  N    PRO A  193   41.37234  61.45505  12.99835 N_R    3 0 -0.29000
ATOM    1672  CA   PRO A  193   40.06840  61.69507  12.41146 C_3    4 0  0.11000
ATOM    1673 HCA   PRO A  193   39.47594  62.33640  13.06781 H_     1 0  0.00000
ATOM    1674  C    PRO A  193   39.28919  60.49672  12.07681 C_2    3 0  0.51000
ATOM    1675  O    PRO A  193   39.87008  59.42766  11.94773 O_2    1 2 -0.51000
ATOM    1676  CB   PRO A  193   40.41711  62.49028  11.12841 C_3    4 0  0.00000
ATOM    1677 HCB   PRO A  193   40.56218  63.54698  11.36887 H_     1 0  0.00000
ATOM    1678 HCB   PRO A  193   39.65859  62.41414  10.34345 H_     1 0  0.00000
ATOM    1679  CG   PRO A  193   41.75626  61.89063  10.68129 C_3    4 0  0.00000
ATOM    1680 HCG   PRO A  193   42.35124  62.60695  10.10800 H_     1 0  0.00000
ATOM    1681 HCG   PRO A  193   41.58745  60.99564  10.07472 H_     1 0  0.00000
ATOM    1682  CD   PRO A  193   42.42507  61.51922  12.01596 C_3    4 0  0.18000
ATOM    1683 HCD   PRO A  193   42.94295  60.55941  11.92892 H_     1 0  0.00000
ATOM    1684 HCD   PRO A  193   43.14849  62.29434  12.28848 H_     1 0  0.00000
ATOM    1685  N    PHE A  194   37.98625  60.58596  11.84752 N_R    3 0 -0.47000
ATOM    1686 HN    PHE A  194   37.61958  61.46561  11.96375 H___A  1 0  0.31000
ATOM    1687  CA   PHE A  194   37.11995  59.49531  11.42864 C_3    4 0  0.16000
ATOM    1688 HCA   PHE A  194   37.61537  59.02694  10.57157 H_     1 0  0.00000
ATOM    1689  C    PHE A  194   35.76654  59.90357  10.93433 C_R    3 0  0.51000
ATOM    1690  O    PHE A  194   35.30387  61.03366  11.22888 O_2    1 2 -0.51000
ATOM    1691  CB   PHE A  194   36.96577  58.40260  12.54106 C_3    4 0  0.00000
ATOM    1692 HCB   PHE A  194   37.95187  58.02775  12.82072 H_     1 0  0.00000
ATOM    1693 HCB   PHE A  194   36.43753  57.53462  12.13585 H_     1 0  0.00000
ATOM    1694  CG   PHE A  194   36.24539  58.87602  13.75411 C_R    3 0  0.00000
ATOM    1695  CD1  PHE A  194   34.83683  59.00603  13.74060 C_R    3 0  0.00000
ATOM    1696 HCD1  PHE A  194   34.29537  58.75317  12.91522 H_     1 0  0.00000
ATOM    1697  CD2  PHE A  194   36.94085  59.20329  14.94175 C_R    3 0  0.00000
ATOM    1698 HCD2  PHE A  194   37.95419  59.09770  14.99169 H_     1 0  0.00000
ATOM    1699  CE1  PHE A  194   34.14713  59.48957  14.85860 C_R    3 0  0.00000
ATOM    1700 HCE1  PHE A  194   33.13645  59.60110  14.81584 H_     1 0  0.00000
ATOM    1701  CE2  PHE A  194   36.24605  59.66943  16.07307 C_R    3 0  0.00000
ATOM    1702 HCE2  PHE A  194   36.75462  59.90088  16.92594 H_     1 0  0.00000
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ATOM    1703  CZ   PHE A  194   34.84936  59.81467  16.02638 C_R    3 0  0.00000
ATOM    1704 HCZ   PHE A  194   34.33702  60.15380  16.83624 H_     1 0  0.00000
ATOM    1705  N    ARG A  195   35.02452  58.98332  10.25531 N_R    3 0 -0.47000
ATOM    1706 HN    ARG A  195   35.48580  58.16409  10.01531 H___A  1 0  0.31000
ATOM    1707  CA   ARG A  195   33.62278  59.03691   9.91331 C_3    4 0  0.16000
ATOM    1708 HCA   ARG A  195   33.15086  59.89387  10.39481 H_     1 0  0.00000
ATOM    1709  C    ARG A  195   32.92955  57.78259  10.36290 C_R    3 0  0.51000
ATOM    1710  O    ARG A  195   33.30349  56.67969   9.87998 O_2    1 2 -0.51000
ATOM    1711  CB   ARG A  195   33.40456  59.16996   8.37808 C_3    4 0  0.00000
ATOM    1712 HCB   ARG A  195   32.33119  59.26635   8.18946 H_     1 0  0.00000
ATOM    1713 HCB   ARG A  195   33.75696  58.25490   7.90478 H_     1 0  0.00000
ATOM    1714  CG   ARG A  195   34.13113  60.32659   7.65466 C_3    4 0  0.00000
ATOM    1715 HCG   ARG A  195   35.20865  60.16090   7.73970 H_     1 0  0.00000
ATOM    1716 HCG   ARG A  195   33.90292  61.26815   8.14980 H_     1 0  0.00000
ATOM    1717  CD   ARG A  195   33.71634  60.42430   6.15465 C_3    4 0  0.38000
ATOM    1718 HCD   ARG A  195   32.91619  61.16175   6.05286 H_     1 0  0.00000
ATOM    1719 HCD   ARG A  195   33.31645  59.47990   5.78065 H_     1 0  0.00000
ATOM    1720  NE   ARG A  195   34.80435  60.84133   5.33717 N_R    3 0 -0.70000
ATOM    1721 HNE   ARG A  195   34.88380  61.78629   5.16093 H___A  1 0  0.44000
ATOM    1722  CZ   ARG A  195   35.75260  60.04379   4.83773 C_R    3 0  0.64000
ATOM    1723  NH1  ARG A  195   35.79815  58.71989   4.93470 N_R    3 0 -0.80000
ATOM    1724 HNH1  ARG A  195   36.56040  58.24988   4.57818 H___A  1 0  0.46000
ATOM    1725 HNH1  ARG A  195   35.08628  58.20271   5.31418 H___A  1 0  0.46000
ATOM    1726  NH2  ARG A  195   36.75124  60.61555   4.18587 N_R    3 0 -0.80000
ATOM    1727 HNH2  ARG A  195   37.45457  60.07043   3.81100 H___A  1 0  0.46000
ATOM    1728 HNH2  ARG A  195   36.77278  61.57484   4.08013 H___A  1 0  0.46000
ATOM    1729  N    ILE A  196   31.89292  57.80241  11.24256 N_R    3 0 -0.47000
ATOM    1730 HN    ILE A  196   31.63809  58.65583  11.59761 H___A  1 0  0.31000
ATOM    1731  CA   ILE A  196   31.14824  56.63888  11.68260 C_3    4 0  0.16000
ATOM    1732 HCA   ILE A  196   31.33298  55.84082  10.96393 H_     1 0  0.00000
ATOM    1733  C    ILE A  196   29.67159  56.81021  11.67374 C_R    3 0  0.51000
ATOM    1734  O    ILE A  196   29.17651  57.91778  11.98411 O_2    1 2 -0.51000
ATOM    1735  CB   ILE A  196   31.62157  56.09958  13.07424 C_3    4 0  0.00000
ATOM    1736 HCB   ILE A  196   31.02421  55.20648  13.28162 H_     1 0  0.00000
ATOM    1737  CG1  ILE A  196   31.43992  57.08785  14.27792 C_3    4 0  0.00000
ATOM    1738 HCG1  ILE A  196   31.33422  58.10650  13.90475 H_     1 0  0.00000
ATOM    1739 HCG1  ILE A  196   32.32463  57.08551  14.91981 H_     1 0  0.00000
ATOM    1740  CG2  ILE A  196   33.07346  55.57014  12.99310 C_3    4 0  0.00000
ATOM    1741 HCG2  ILE A  196   33.78573  56.36907  12.79836 H_     1 0  0.00000
ATOM    1742 HCG2  ILE A  196   33.31309  55.09658  13.93274 H_     1 0  0.00000
ATOM    1743 HCG2  ILE A  196   33.16401  54.81775  12.22019 H_     1 0  0.00000
ATOM    1744  CD1  ILE A  196   30.23410  56.75572  15.19048 C_3    4 0  0.00000
ATOM    1745 HCD1  ILE A  196   30.34722  55.75726  15.61357 H_     1 0  0.00000
ATOM    1746 HCD1  ILE A  196   30.17538  57.46939  16.01110 H_     1 0  0.00000
ATOM    1747 HCD1  ILE A  196   29.30858  56.80028  14.62039 H_     1 0  0.00000
ATOM    1748  N    VAL A  197   28.89002  55.74281  11.37022 N_R    3 0 -0.47000
ATOM    1749 HN    VAL A  197   29.36857  54.94809  11.13802 H___A  1 0  0.31000
ATOM    1750  CA   VAL A  197   27.45038  55.68170  11.38668 C_3    4 0  0.16000
ATOM    1751 HCA   VAL A  197   27.09405  56.62978  11.78749 H_     1 0  0.00000
ATOM    1752  C    VAL A  197   26.95166  54.61717  12.31593 C_R    3 0  0.51000
ATOM    1753  O    VAL A  197   27.48369  53.48163  12.33641 O_2    1 2 -0.51000
ATOM    1754  CB   VAL A  197   26.86562  55.60393   9.93118 C_3    4 0  0.00000
ATOM    1755 HCB   VAL A  197   27.31192  56.42977   9.36702 H_     1 0  0.00000
ATOM    1756  CG1  VAL A  197   27.22164  54.30567   9.15750 C_3    4 0  0.00000
ATOM    1757 HCG1  VAL A  197   26.76189  53.44039   9.63337 H_     1 0  0.00000
ATOM    1758 HCG1  VAL A  197   26.85779  54.36257   8.13026 H_     1 0  0.00000
ATOM    1759 HCG1  VAL A  197   28.30143  54.16796   9.12016 H_     1 0  0.00000
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ATOM   1760  CG2 VAL A 197   25.33163  55.85004   9.88779 C_3    4 0  0.00000
ATOM   1761 HCG2 VAL A 197   25.09234  56.82974  10.30382 H_     1 0  0.00000
ATOM   1762 HCG2 VAL A 197   24.97177  55.82897   8.85779 H_     1 0  0.00000
ATOM   1763 HCG2 VAL A 197   24.80034  55.08616  10.45649 H_     1 0  0.00000
ATOM   1764  N   VAL A 198   25.91908  54.89452  13.14563 N_R    3 0 -0.47000
ATOM   1765 HN   VAL A 198   25.59643  55.78545  13.09734 H___A  1 0  0.31000
ATOM   1766  CA  VAL A 198   25.27994  54.03392  14.10012 C_3    4 0  0.16000
ATOM   1767 HCA  VAL A 198   25.80304  53.08423  14.11793 H_     1 0  0.00000
ATOM   1768  C   VAL A 198   23.85450  53.81653  13.69508 C_R    3 0  0.51000
ATOM   1769  O   VAL A 198   23.09088  54.81247  13.77827 O_2    1 2 -0.51000
ATOM   1770  CB  VAL A 198   25.35365  54.61226  15.55812 C_3    4 0  0.00000
ATOM   1771 HCB  VAL A 198   24.70091  55.47999  15.61232 H_     1 0  0.00000
ATOM   1772  CG1 VAL A 198   24.81111  53.61558  16.62367 C_3    4 0  0.00000
ATOM   1773 HCG1 VAL A 198   25.40710  52.70444  16.64418 H_     1 0  0.00000
ATOM   1774 HCG1 VAL A 198   24.83045  54.06896  17.61507 H_     1 0  0.00000
ATOM   1775 HCG1 VAL A 198   23.77633  53.34596  16.40950 H_     1 0  0.00000
ATOM   1776  CG2 VAL A 198   26.76942  55.12347  15.93720 C_3    4 0  0.00000
ATOM   1777 HCG2 VAL A 198   27.08265  55.91455  15.25544 H_     1 0  0.00000
ATOM   1778 HCG2 VAL A 198   26.76568  55.54844  16.93975 H_     1 0  0.00000
ATOM   1779 HCG2 VAL A 198   27.49634  54.31336  15.89685 H_     1 0  0.00000
ATOM   1780  N   PRO A 199   23.34248  52.62003  13.27951 N_R    3 0 -0.29000
ATOM   1781  CA  PRO A 199   21.93611  52.29319  13.32309 C_3    4 0  0.11000
ATOM   1782 HCA  PRO A 199   21.31138  53.13718  13.01597 H_     1 0  0.00000
ATOM   1783  C   PRO A 199   21.53184  51.82791  14.65632 C_2    3 0  0.51000
ATOM   1784  O   PRO A 199   22.22599  50.97119  15.19345 O_2    1 2 -0.51000
ATOM   1785  CB  PRO A 199   21.81763  51.18273  12.25365 C_3    4 0  0.00000
ATOM   1786 HCB  PRO A 199   21.64558  51.63235  11.27204 H_     1 0  0.00000
ATOM   1787 HCB  PRO A 199   21.01001  50.47871  12.46634 H_     1 0  0.00000
ATOM   1788  CG  PRO A 199   23.18028  50.47457  12.25103 C_3    4 0  0.00000
ATOM   1789 HCG  PRO A 199   23.46458  50.15926  11.24352 H_     1 0  0.00000
ATOM   1790 HCG  PRO A 199   23.14752  49.59441  12.89873 H_     1 0  0.00000
ATOM   1791  CD  PRO A 199   24.15094  51.52667  12.81714 C_3    4 0  0.18000
ATOM   1792 HCD  PRO A 199   24.72990  51.09099  13.63639 H_     1 0  0.00000
ATOM   1793 HCD  PRO A 199   24.83219  51.86564  12.03049 H_     1 0  0.00000
ATOM   1794  N   GLY A 200   20.47788  52.30487  15.30715 N_R    3 0 -0.47000
ATOM   1795 HN   GLY A 200   20.00503  53.04539  14.91932 H___A  1 0  0.31000
ATOM   1796  CA  GLY A 200   20.06565  51.84280  16.60902 C_3    4 0  0.16000
ATOM   1797 HCA  GLY A 200   20.62643  52.41370  17.34786 H_     1 0  0.00000
ATOM   1798 HCA  GLY A 200   20.35081  50.79538  16.74375 H_     1 0  0.00000
ATOM   1799  C   GLY A 200   18.63009  51.96858  16.95828 C_R    3 0  0.51000
ATOM   1800  O   GLY A 200   18.07503  53.09013  16.96197 O_2    1 2 -0.51000
ATOM   1801  N   ARG A 201   17.96897  50.87242  17.40306 N_R    3 0 -0.47000
ATOM   1802 HN   ARG A 201   18.41813  50.02433  17.26649 H___A  1 0  0.31000
ATOM   1803  CA  ARG A 201   16.71385  50.83258  18.10928 C_3    4 0  0.16000
ATOM   1804 HCA  ARG A 201   15.94447  51.28124  17.48588 H_     1 0  0.00000
ATOM   1805  C   ARG A 201   16.79600  51.55290  19.41532 C_R    3 0  0.51000
ATOM   1806  O   ARG A 201   17.72857  51.26422  20.19443 O_2    1 2 -0.51000
ATOM   1807  CB  ARG A 201   16.33515  49.33511  18.29299 C_3    4 0  0.00000
ATOM   1808 HCB  ARG A 201   17.09896  48.84710  18.90093 H_     1 0  0.00000
ATOM   1809 HCB  ARG A 201   16.35667  48.85048  17.31385 H_     1 0  0.00000
ATOM   1810  CG  ARG A 201   14.93633  49.08830  18.92935 C_3    4 0  0.00000
ATOM   1811 HCG  ARG A 201   14.20119  49.73661  18.44362 H_     1 0  0.00000
ATOM   1812 HCG  ARG A 201   14.96904  49.35710  19.98814 H_     1 0  0.00000
ATOM   1813  CD  ARG A 201   14.44952  47.62378  18.79004 C_3    4 0  0.38000
ATOM   1814 HCD  ARG A 201   14.32718  47.39027  17.72957 H_     1 0  0.00000
ATOM   1815 HCD  ARG A 201   13.47593  47.52196  19.27487 H_     1 0  0.00000
ATOM   1816  NE  ARG A 201   15.35213  46.70160  19.39175 N_R    3 0 -0.70000
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ATOM    1817 HNE   ARG A  201   15.99757  47.03553  20.01243 H___A  1 0  0.44000
ATOM    1818  CZ   ARG A  201   15.42791  45.38961  19.19607 C_R    3 0  0.64000
ATOM    1819  NH1  ARG A  201   14.71397  44.72376  18.30066 N_R    3 0 -0.80000
ATOM    1820 HNH1  ARG A  201   14.83361  43.77168  18.20658 H___A  1 0  0.46000
ATOM    1821 HNH1  ARG A  201   14.08561  45.19868  17.74432 H___A  1 0  0.46000
ATOM    1822  NH2  ARG A  201   16.28532  44.71550  19.94229 N_R    3 0 -0.80000
ATOM    1823 HNH2  ARG A  201   16.40816  43.76941  19.82222 H___A  1 0  0.46000
ATOM    1824 HNH2  ARG A  201   16.78439  45.16917  20.62853 H___A  1 0  0.46000
ATOM    1825  N    VAL A  202   15.92097  52.52548  19.75317 N_R    3 0 -0.47000
ATOM    1826 HN    VAL A  202   15.24251  52.71602  19.12152 H___A  1 0  0.31000
ATOM    1827  CA   VAL A  202   15.86680  53.32838  20.94621 C_3    4 0  0.16000
ATOM    1828 HCA   VAL A  202   16.54160  52.89165  21.68672 H_     1 0  0.00000
ATOM    1829  C    VAL A  202   14.49759  53.32273  21.55880 C_R    3 0  0.51000
ATOM    1830  O    VAL A  202   13.48534  53.02656  20.87386 O_2    1 2 -0.51000
ATOM    1831  CB   VAL A  202   16.36250  54.78691  20.65764 C_3    4 0  0.00000
ATOM    1832 HCB   VAL A  202   16.33930  55.33998  21.60221 H_     1 0  0.00000
ATOM    1833  CG1  VAL A  202   17.83761  54.81672  20.16532 C_3    4 0  0.00000
ATOM    1834 HCG1  VAL A  202   17.96336  54.21568  19.26981 H_     1 0  0.00000
ATOM    1835 HCG1  VAL A  202   18.14307  55.83019  19.92219 H_     1 0  0.00000
ATOM    1836 HCG1  VAL A  202   18.50812  54.43747  20.93272 H_     1 0  0.00000
ATOM    1837  CG2  VAL A  202   15.45650  55.56317  19.66352 C_3    4 0  0.00000
ATOM    1838 HCG2  VAL A  202   14.42308  55.57789  20.00933 H_     1 0  0.00000
ATOM    1839 HCG2  VAL A  202   15.79079  56.59703  19.58454 H_     1 0  0.00000
ATOM    1840 HCG2  VAL A  202   15.49185  55.10805  18.67358 H_     1 0  0.00000
ATOM    1841  N    PHE A  203   14.38217  53.61317  22.87877 N_R    3 0 -0.47000
ATOM    1842 HN    PHE A  203   15.18976  53.86137  23.32462 H___A  1 0  0.31000
ATOM    1843  CA   PHE A  203   13.22426  53.44332  23.71665 C_3    4 0  0.16000
ATOM    1844 HCA   PHE A  203   12.36935  53.11226  23.12480 H_     1 0  0.00000
ATOM    1845  C    PHE A  203   12.84960  54.68509  24.46008 C_R    3 0  0.51000
ATOM    1846  O    PHE A  203   13.72751  55.33415  25.06984 O_2    1 2 -0.51000
ATOM    1847  CB   PHE A  203   13.53051  52.32472  24.75654 C_3    4 0  0.00000
ATOM    1848 HCB   PHE A  203   12.63989  52.17341  25.37027 H_     1 0  0.00000
ATOM    1849 HCB   PHE A  203   14.31677  52.67151  25.43139 H_     1 0  0.00000
ATOM    1850  CG   PHE A  203   13.94056  51.01686  24.16952 C_R    3 0  0.00000
ATOM    1851  CD1  PHE A  203   15.26051  50.81820  23.69758 C_R    3 0  0.00000
ATOM    1852 HCD1  PHE A  203   15.95536  51.56354  23.77284 H_     1 0  0.00000
ATOM    1853  CD2  PHE A  203   13.03013  49.93731  24.09338 C_R    3 0  0.00000
ATOM    1854 HCD2  PHE A  203   12.07794  50.03989  24.44894 H_     1 0  0.00000
ATOM    1855  CE1  PHE A  203   15.64587  49.59436  23.12543 C_R    3 0  0.00000
ATOM    1856 HCE1  PHE A  203   16.59708  49.47845  22.77359 H_     1 0  0.00000
ATOM    1857  CE2  PHE A  203   13.41841  48.70553  23.53465 C_R    3 0  0.00000
ATOM    1858 HCE2  PHE A  203   12.74925  47.93450  23.48392 H_     1 0  0.00000
ATOM    1859  CZ   PHE A  203   14.72454  48.53604  23.04335 C_R    3 0  0.00000
ATOM    1860 HCZ   PHE A  203   15.00325  47.64352  22.63099 H_     1 0  0.00000
ATOM    1861  N    ARG A  204   11.56965  55.11201  24.54897 N_R    3 0 -0.47000
ATOM    1862 HN    ARG A  204   10.94088  54.63353  24.01243 H___A  1 0  0.31000
ATOM    1863  CA   ARG A  204   11.09746  56.23156  25.33234 C_3    4 0  0.16000
ATOM    1864 HCA   ARG A  204   11.78927  56.39317  26.16511 H_     1 0  0.00000
ATOM    1865  C    ARG A  204    9.75356  56.00100  25.92575 C_R    3 0  0.51000
ATOM    1866  O    ARG A  204    8.92575  55.32558  25.26906 O_2    1 2 -0.51000
ATOM    1867  CB   ARG A  204   11.09105  57.49323  24.42645 C_3    4 0  0.00000
ATOM    1868 HCB   ARG A  204   10.22571  57.47377  23.75805 H_     1 0  0.00000
ATOM    1869 HCB   ARG A  204   11.98312  57.46419  23.79611 H_     1 0  0.00000
ATOM    1870  CG   ARG A  204   11.09595  58.82413  25.22813 C_3    4 0  0.00000
ATOM    1871 HCG   ARG A  204   11.88434  58.79547  25.98200 H_     1 0  0.00000
ATOM    1872 HCG   ARG A  204   10.13731  58.93338  25.73829 H_     1 0  0.00000
ATOM    1873  CD   ARG A  204   11.33521  60.06833  24.35002 C_3    4 0  0.38000
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ATOM   1874 HCD  ARG A 204   11.38771  60.95419  24.98528 H_     1 0  0.00000
ATOM   1875 HCD  ARG A 204   10.48800  60.17703  23.66753 H_     1 0  0.00000
ATOM   1876  NE  ARG A 204   12.58024  59.94864  23.65279 N_R    3 0 -0.70000
ATOM   1877 HNE  ARG A 204   13.24301  59.39189  24.06758 H___A  1 0  0.44000
ATOM   1878  CZ  ARG A 204   12.87897  60.57390  22.51046 C_R    3 0  0.64000
ATOM   1879  NH1 ARG A 204   12.03783  61.40327  21.90603 N_R    3 0 -0.80000
ATOM   1880 HNH1 ARG A 204   12.28186  61.83262  21.08070 H___A  1 0  0.46000
ATOM   1881 HNH1 ARG A 204   11.16874  61.57353  22.30570 H___A  1 0  0.46000
ATOM   1882  NH2 ARG A 204   14.06591  60.37700  21.95212 N_R    3 0 -0.80000
ATOM   1883 HNH2 ARG A 204   14.35782  60.89051  21.19099 H___A  1 0  0.46000
ATOM   1884 HNH2 ARG A 204   14.67269  59.73518  22.31422 H___A  1 0  0.46000
ATOM   1885  N   PHE A 205    9.41008  56.54456  27.12584 N_R    3 0 -0.47000
ATOM   1886 HN   PHE A 205   10.08182  57.07713  27.55961 H___A  1 0  0.31000
ATOM   1887  CA  PHE A 205    8.12003  56.42615  27.77657 C_3    4 0  0.16000
ATOM   1888 HCA  PHE A 205    7.76662  55.40211  27.62208 H_     1 0  0.00000
ATOM   1889  C   PHE A 205    7.08932  57.32966  27.16415 C_R    3 0  0.51000
ATOM   1890  O   PHE A 205    6.41392  58.14492  27.83326 O_2    1 2 -0.51000
ATOM   1891  CB  PHE A 205    8.31904  56.59945  29.31664 C_3    4 0  0.00000
ATOM   1892 HCB  PHE A 205    8.66894  57.61305  29.51217 H_     1 0  0.00000
ATOM   1893 HCB  PHE A 205    9.11765  55.93085  29.65169 H_     1 0  0.00000
ATOM   1894  CG  PHE A 205    7.11010  56.30833  30.14074 C_R    3 0  0.00000
ATOM   1895  CD1 PHE A 205    6.44556  57.33070  30.86186 C_R    3 0  0.00000
ATOM   1896 HCD1 PHE A 205    6.78089  58.29605  30.82181 H_     1 0  0.00000
ATOM   1897  CD2 PHE A 205    6.60606  54.98959  30.22828 C_R    3 0  0.00000
ATOM   1898 HCD2 PHE A 205    7.06296  54.23122  29.72286 H_     1 0  0.00000
ATOM   1899  CE1 PHE A 205    5.30903  57.04117  31.64095 C_R    3 0  0.00000
ATOM   1900 HCE1 PHE A 205    4.83459  57.78893  32.15227 H_     1 0  0.00000
ATOM   1901  CE2 PHE A 205    5.47484  54.69666  31.01168 C_R    3 0  0.00000
ATOM   1902 HCE2 PHE A 205    5.12625  53.73705  31.06798 H_     1 0  0.00000
ATOM   1903  CZ  PHE A 205    4.82489  55.72351  31.71759 C_R    3 0  0.00000
ATOM   1904 HCZ  PHE A 205    4.00169  55.51190  32.28619 H_     1 0  0.00000
ATOM   1905  N   GLU A 206    6.87545  57.19157  25.84090 N_R    3 0 -0.47000
ATOM   1906 HN   GLU A 206    7.45136  56.53750  25.45896 H___A  1 0  0.31000
ATOM   1907  CA  GLU A 206    5.95512  57.88586  24.98146 C_3    4 0  0.16000
ATOM   1908 HCA  GLU A 206    5.71747  58.85910  25.41883 H_     1 0  0.00000
ATOM   1909  C   GLU A 206    4.68630  57.11264  24.80975 C_R    3 0  0.51000
ATOM   1910  O   GLU A 206    4.59792  55.93554  25.23982 O_2    1 2 -0.51000
ATOM   1911  CB  GLU A 206    6.69853  58.08983  23.61982 C_3    4 0  0.00000
ATOM   1912 HCB  GLU A 206    6.65057  57.15074  23.06867 H_     1 0  0.00000
ATOM   1913 HCB  GLU A 206    7.75945  58.29147  23.80040 H_     1 0  0.00000
ATOM   1914  CG  GLU A 206    6.16802  59.20742  22.68244 C_3    4 0 -0.10000
ATOM   1915 HCG  GLU A 206    5.10255  59.07199  22.49964 H_     1 0  0.00000
ATOM   1916 HCG  GLU A 206    6.66252  59.12043  21.71127 H_     1 0  0.00000
ATOM   1917  CD  GLU A 206    6.42321  60.56305  23.19733 C_R    3 0  0.62000
ATOM   1918  OE1 GLU A 206    7.57139  61.05903  23.12491 O_2    1 2 -0.76000
ATOM   1919  OE2 GLU A 206    5.47939  61.24017  23.66496 O_2    1 2 -0.76000
ATOM   1920  N   GLN A 207    3.61995  57.65397  24.16995 N_R    3 0 -0.47000
ATOM   1921 HN   GLN A 207    3.71655  58.57720  23.88610 H___A  1 0  0.31000
ATOM   1922  CA  GLN A 207    2.40391  56.95458  23.81381 C_3    4 0  0.16000
ATOM   1923 HCA  GLN A 207    2.25819  56.14400  24.53396 H_     1 0  0.00000
ATOM   1924  C   GLN A 207    2.47794  56.33287  22.48333 C_2    3 0  0.51000
ATOM   1925  O   GLN A 207    3.38103  56.62588  21.71337 O_2    1 2 -0.51000
ATOM   1926  CB  GLN A 207    1.19875  57.93274  23.99437 C_3    4 0  0.00000
ATOM   1927 HCB  GLN A 207    1.29978  58.75326  23.27723 H_     1 0  0.00000
ATOM   1928 HCB  GLN A 207    1.26225  58.37284  24.99500 H_     1 0  0.00000
ATOM   1929  CG  GLN A 207   -0.22894  57.32943  23.84080 C_3    4 0  0.00000
ATOM   1930 HCG  GLN A 207   -0.42097  57.14664  22.78073 H_     1 0  0.00000
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ATOM    1931 HCG   GLN A  207   -0.96671  58.06462  24.17133 H_     1 0  0.00000
ATOM    1932  CD   GLN A  207   -0.44289  56.08188  24.60337 C_R    3 0  0.55000
ATOM    1933  OE1  GLN A  207   -0.56615  54.98790  24.01078 O_2    1 2 -0.55000
ATOM    1934  NE2  GLN A  207   -0.48107  56.05346  25.94044 N_R    3 0 -0.60000
ATOM    1935 HNE2  GLN A  207   -0.60165  55.20422  26.39047 H___A  1 0  0.30000
ATOM    1936 HNE2  GLN A  207   -0.37704  56.86909  26.45153 H___A  1 0  0.30000
ATOM    1937  N    THR A  208    1.58736  55.41940  22.12688 N_R    3 0 -0.47000
ATOM    1938 HN    THR A  208    0.87656  55.26213  22.74414 H___A  1 0  0.31000
ATOM    1939  CA   THR A  208    1.59372  54.59702  20.93718 C_3    4 0  0.16000
ATOM    1940 HCA   THR A  208    2.53145  54.70938  20.38752 H_     1 0  0.00000
ATOM    1941  C    THR A  208    0.48231  55.01503  20.02411 C_R    3 0  0.51000
ATOM    1942  O    THR A  208   -0.61146  54.39386  20.01899 O_2    1 2 -0.51000
ATOM    1943  CB   THR A  208    1.54010  53.09881  21.39175 C_3    4 0  0.23000
ATOM    1944 HCB   THR A  208    0.62292  52.92898  21.96423 H_     1 0  0.00000
ATOM    1945  OG1  THR A  208    2.63403  52.77762  22.25678 O_3    2 2 -0.66000
ATOM    1946 HOG1  THR A  208    2.66132  53.50240  22.91292 H___A  1 0  0.43000
ATOM    1947  CG2  THR A  208    1.58471  52.07993  20.22937 C_3    4 0  0.00000
ATOM    1948 HCG2  THR A  208    2.47390  52.23863  19.61826 H_     1 0  0.00000
ATOM    1949 HCG2  THR A  208    1.60287  51.06072  20.61925 H_     1 0  0.00000
ATOM    1950 HCG2  THR A  208    0.69964  52.18545  19.60739 H_     1 0  0.00000
ATOM    1951  N    ASP A  209    0.66974  56.03635  19.14797 N_R    3 0 -0.47000
ATOM    1952 HN    ASP A  209    1.57422  56.35256  19.09060 H___A  1 0  0.31000
ATOM    1953  CA   ASP A  209   -0.27288  56.58196  18.19163 C_3    4 0  0.16000
ATOM    1954 HCA   ASP A  209   -1.18526  55.99583  18.24953 H_     1 0  0.00000
ATOM    1955  C    ASP A  209    0.21453  56.41815  16.79360 C_R    3 0  0.51000
ATOM    1956  O    ASP A  209    1.41572  56.13599  16.59715 O_2    1 2 -0.51000
ATOM    1957  CB   ASP A  209   -0.72635  58.03933  18.51354 C_3    4 0 -0.10000
ATOM    1958 HCB   ASP A  209   -0.86333  58.13400  19.59474 H_     1 0  0.00000
ATOM    1959 HCB   ASP A  209   -1.70795  58.20067  18.05837 H_     1 0  0.00000
ATOM    1960  CG   ASP A  209    0.13063  59.13645  18.01720 C_R    3 0  0.62000
ATOM    1961  OD1  ASP A  209    0.43694  59.21430  16.80383 O_2    1 2 -0.76000
ATOM    1962  OD2  ASP A  209    0.47200  60.06845  18.77539 O_2    1 2 -0.76000
ATOM    1963  N    ALA A  210   -0.60802  56.61720  15.73377 N_R    3 0 -0.47000
ATOM    1964 HN    ALA A  210   -1.49823  56.93597  15.93375 H___A  1 0  0.31000
ATOM    1965  CA   ALA A  210   -0.29016  56.35665  14.35239 C_3    4 0  0.16000
ATOM    1966 HCA   ALA A  210   -0.18090  55.27226  14.27086 H_     1 0  0.00000
ATOM    1967  C    ALA A  210    0.96118  56.96820  13.81483 C_R    3 0  0.51000
ATOM    1968  O    ALA A  210    1.45017  56.46383  12.77154 O_2    1 2 -0.51000
ATOM    1969  CB   ALA A  210   -1.49864  56.75878  13.47038 C_3    4 0  0.00000
ATOM    1970 HCB   ALA A  210   -1.69511  57.82899  13.55903 H_     1 0  0.00000
ATOM    1971 HCB   ALA A  210   -1.30961  56.52325  12.42057 H_     1 0  0.00000
ATOM    1972 HCB   ALA A  210   -2.39048  56.21232  13.78253 H_     1 0  0.00000
ATOM    1973  N    THR A  211    1.57327  58.01802  14.41844 N_R    3 0 -0.47000
ATOM    1974 HN    THR A  211    1.15605  58.39778  15.19929 H___A  1 0  0.31000
ATOM    1975  CA   THR A  211    2.82834  58.60402  14.01853 C_3    4 0  0.16000
ATOM    1976 HCA   THR A  211    3.27962  58.02327  13.21059 H_     1 0  0.00000
ATOM    1977  C    THR A  211    3.83620  58.61674  15.11273 C_R    3 0  0.51000
ATOM    1978  O    THR A  211    4.97538  59.06420  14.83173 O_2    1 2 -0.51000
ATOM    1979  CB   THR A  211    2.60775  60.05248  13.47685 C_3    4 0  0.23000
ATOM    1980 HCB   THR A  211    3.56980  60.46062  13.15252 H_     1 0  0.00000
ATOM    1981  OG1  THR A  211    2.09719  60.94456  14.47152 O_3    2 2 -0.66000
ATOM    1982 HOG1  THR A  211    2.74885  60.95782  15.19728 H___A  1 0  0.43000
ATOM    1983  CG2  THR A  211    1.66701  60.10185  12.24619 C_3    4 0  0.00000
ATOM    1984 HCG2  THR A  211    0.67111  59.74039  12.50487 H_     1 0  0.00000
ATOM    1985 HCG2  THR A  211    1.57625  61.12803  11.88614 H_     1 0  0.00000
ATOM    1986 HCG2  THR A  211    2.06759  59.48698  11.43865 H_     1 0  0.00000
ATOM    1987  N    HSD A  212    3.56450  58.17064  16.36470 N_R    3 0 -0.47000
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ATOM    1988 HN    HSD A  212     2.75723  57.65949  16.48519 H___A  1 0  0.31000
ATOM    1989  CA   HSD A  212     4.40217  58.35583  17.52452 C_3    4 0  0.16000
ATOM    1990 HCA   HSD A  212     5.41150  58.66239  17.23155 H_     1 0  0.00000
ATOM    1991  C    HSD A  212     4.50282  57.06932  18.26002 C_R    3 0  0.51000
ATOM    1992  O    HSD A  212     3.45016  56.56569  18.71538 O_2    1 2 -0.51000
ATOM    1993  CB   HSD A  212     3.84768  59.45848  18.47519 C_3    4 0  0.10000
ATOM    1994 HCB   HSD A  212     4.50546  59.52605  19.34692 H_     1 0  0.00000
ATOM    1995 HCB   HSD A  212     2.86376  59.16272  18.83696 H_     1 0  0.00000
ATOM    1996  CG   HSD A  212     3.74848  60.82014  17.90045 C_R    3 0  0.22000
ATOM    1997  ND1  HSD A  212     4.07364  61.22766  16.65469 N_R    2 1 -0.70000
ATOM    1998  CD2  HSD A  212     3.31751  61.94325  18.60052 C_R    3 0  0.04000
ATOM    1999 HCD2  HSD A  212     2.99123  61.97219  19.56812 H_     1 0  0.00000
ATOM    2000  CE1  HSD A  212     3.88329  62.55476  16.60474 C_R    3 0  0.38000
ATOM    2001 HCE1  HSD A  212     4.06499  63.13998  15.78877 H_     1 0  0.00000
ATOM    2002  NE2  HSD A  212     3.41940  62.99152  17.77880 N_R    3 0 -0.36000
ATOM    2003 HNE2  HSD A  212     3.19938  63.90614  17.99949 H___A  1 0  0.32000
ATOM    2004  N    GLU A  213     5.69850  56.46143  18.44180 N_R    3 0 -0.47000
ATOM    2005 HN    GLU A  213     6.47638  56.91822  18.09002 H___A  1 0  0.31000
ATOM    2006  CA   GLU A  213     5.93633  55.21804  19.13206 C_3    4 0  0.16000
ATOM    2007 HCA   GLU A  213     4.98584  54.79829  19.47238 H_     1 0  0.00000
ATOM    2008  C    GLU A  213     6.73945  55.43096  20.36639 C_R    3 0  0.51000
ATOM    2009  O    GLU A  213     7.29956  56.52397  20.61675 O_2    1 2 -0.51000
ATOM    2010  CB   GLU A  213     6.62761  54.18410  18.16964 C_3    4 0  0.00000
ATOM    2011 HCB   GLU A  213     7.59132  53.85827  18.56595 H_     1 0  0.00000
ATOM    2012 HCB   GLU A  213     6.86140  54.67536  17.22131 H_     1 0  0.00000
ATOM    2013  CG   GLU A  213     5.78291  52.91881  17.83198 C_3    4 0 -0.10000
ATOM    2014 HCG   GLU A  213     6.23647  52.42631  16.96763 H_     1 0  0.00000
ATOM    2015 HCG   GLU A  213     4.78532  53.24624  17.53860 H_     1 0  0.00000
ATOM    2016  CD   GLU A  213     5.63646  51.88502  18.88226 C_R    3 0  0.62000
ATOM    2017  OE1  GLU A  213     6.28362  51.89127  19.95390 O_2    1 2 -0.76000
ATOM    2018  OE2  GLU A  213     4.84043  50.93555  18.70067 O_2    1 2 -0.76000
ATOM    2019  N    ALA A  214     6.90680  54.36079  21.16703 N_R    3 0 -0.47000
ATOM    2020 HN    ALA A  214     6.56528  53.54263  20.81619 H___A  1 0  0.31000
ATOM    2021  CA   ALA A  214     7.65256  54.23534  22.37539 C_3    4 0  0.16000
ATOM    2022 HCA   ALA A  214     7.96131  55.21832  22.74054 H_     1 0  0.00000
ATOM    2023  C    ALA A  214     8.86353  53.42182  22.10803 C_R    3 0  0.51000
ATOM    2024  O    ALA A  214     9.87773  53.62405  22.81127 O_2    1 2 -0.51000
ATOM    2025  CB   ALA A  214     6.76455  53.55701  23.44531 C_3    4 0  0.00000
ATOM    2026 HCB   ALA A  214     6.43594  52.57251  23.10551 H_     1 0  0.00000
ATOM    2027 HCB   ALA A  214     7.31175  53.43404  24.38102 H_     1 0  0.00000
ATOM    2028 HCB   ALA A  214     5.88325  54.16921  23.63870 H_     1 0  0.00000
ATOM    2029  N    VAL A  215     8.88531  52.48513  21.12720 N_R    3 0 -0.47000
ATOM    2030 HN    VAL A  215     8.04516  52.29231  20.69972 H___A  1 0  0.31000
ATOM    2031  CA   VAL A  215    10.04430  51.77708  20.65118 C_3    4 0  0.16000
ATOM    2032 HCA   VAL A  215    10.93199  52.08619  21.21188 H_     1 0  0.00000
ATOM    2033  C    VAL A  215    10.24068  52.15698  19.22311 C_R    3 0  0.51000
ATOM    2034  O    VAL A  215     9.32964  51.89672  18.40259 O_2    1 2 -0.51000
ATOM    2035  CB   VAL A  215     9.89217  50.22901  20.83520 C_3    4 0  0.00000
ATOM    2036 HCB   VAL A  215     9.12612  49.86661  20.14182 H_     1 0  0.00000
ATOM    2037  CG1  VAL A  215    11.22173  49.49150  20.50112 C_3    4 0  0.00000
ATOM    2038 HCG1  VAL A  215    12.02171  49.81871  21.16589 H_     1 0  0.00000
ATOM    2039 HCG1  VAL A  215    11.09883  48.41289  20.60765 H_     1 0  0.00000
ATOM    2040 HCG1  VAL A  215    11.52742  49.69733  19.47531 H_     1 0  0.00000
ATOM    2041  CG2  VAL A  215     9.41599  49.83960  22.26290 C_3    4 0  0.00000
ATOM    2042 HCG2  VAL A  215     8.42928  50.25906  22.46693 H_     1 0  0.00000
ATOM    2043 HCG2  VAL A  215     9.33930  48.75512  22.35786 H_     1 0  0.00000
ATOM    2044 HCG2  VAL A  215    10.11219  50.21141  23.01422 H_     1 0  0.00000
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ATOM    2045  N    PHE A  216   11.36927  52.77665  18.79968 N_R    3 0 -0.47000
ATOM    2046 HN    PHE A  216   12.06252  52.91277  19.45400 H___A  1 0  0.31000
ATOM    2047  CA   PHE A  216   11.58200  53.25922  17.44672 C_3    4 0  0.16000
ATOM    2048 HCA   PHE A  216   11.14737  52.52641  16.76353 H_     1 0  0.00000
ATOM    2049  C    PHE A  216   13.02056  53.31370  17.07558 C_R    3 0  0.51000
ATOM    2050  O    PHE A  216   13.86550  53.15358  17.97385 O_2    1 2 -0.51000
ATOM    2051  CB   PHE A  216   10.86562  54.62257  17.20773 C_3    4 0  0.00000
ATOM    2052 HCB   PHE A  216    9.78591  54.47201  17.27839 H_     1 0  0.00000
ATOM    2053 HCB   PHE A  216   11.04543  54.95318  16.18203 H_     1 0  0.00000
ATOM    2054  CG   PHE A  216   11.26867  55.69600  18.15611 C_R    3 0  0.00000
ATOM    2055  CD1  PHE A  216   10.64904  55.80300  19.42424 C_R    3 0  0.00000
ATOM    2056 HCD1  PHE A  216    9.91781  55.14452  19.70030 H_     1 0  0.00000
ATOM    2057  CD2  PHE A  216   12.27153  56.63188  17.80822 C_R    3 0  0.00000
ATOM    2058 HCD2  PHE A  216   12.73962  56.57746  16.90008 H_     1 0  0.00000
ATOM    2059  CE1  PHE A  216   11.02340  56.81685  20.32367 C_R    3 0  0.00000
ATOM    2060 HCE1  PHE A  216   10.56927  56.88300  21.23672 H_     1 0  0.00000
ATOM    2061  CE2  PHE A  216   12.64069  57.65124  18.70520 C_R    3 0  0.00000
ATOM    2062 HCE2  PHE A  216   13.36217  58.32552  18.44315 H_     1 0  0.00000
ATOM    2063  CZ   PHE A  216   12.01868  57.74108  19.96290 C_R    3 0  0.00000
ATOM    2064 HCZ   PHE A  216   12.28836  58.47853  20.61377 H_     1 0  0.00000
ATOM    2065  N    HSD A  217   13.47178  53.49448  15.81231 N_R    3 0 -0.47000
ATOM    2066 HN    HSD A  217   12.82634  53.66143  15.12952 H___A  1 0  0.31000
ATOM    2067  CA   HSD A  217   14.83053  53.34496  15.35320 C_3    4 0  0.16000
ATOM    2068 HCA   HSD A  217   15.46065  52.99236  16.16494 H_     1 0  0.00000
ATOM    2069  C    HSD A  217   15.42574  54.62490  14.88627 C_R    3 0  0.51000
ATOM    2070  O    HSD A  217   14.80906  55.36130  14.07903 O_2    1 2 -0.51000
ATOM    2071  CB   HSD A  217   14.90519  52.24481  14.25608 C_3    4 0  0.10000
ATOM    2072 HCB   HSD A  217   15.94863  52.09129  13.96591 H_     1 0  0.00000
ATOM    2073 HCB   HSD A  217   14.35630  52.56177  13.36934 H_     1 0  0.00000
ATOM    2074  CG   HSD A  217   14.32894  50.95575  14.69876 C_R    3 0  0.22000
ATOM    2075  ND1  HSD A  217   13.02150  50.72648  14.89476 N_R    2 1 -0.70000
ATOM    2076  CD2  HSD A  217   14.98880  49.76273  14.97096 C_R    3 0  0.04000
ATOM    2077 HCD2  HSD A  217   15.99366  49.59718  14.91634 H_     1 0  0.00000
ATOM    2078  CE1  HSD A  217   12.85981  49.45590  15.27178 C_R    3 0  0.38000
ATOM    2079 HCE1  HSD A  217   11.96457  49.01305  15.47833 H_     1 0  0.00000
ATOM    2080  NE2  HSD A  217   14.05873  48.86584  15.32348 N_R    3 0 -0.36000
ATOM    2081 HNE2  HSD A  217   14.21859  47.94834  15.56967 H___A  1 0  0.32000
ATOM    2082  N    GLN A  218   16.66859  54.96702  15.30865 N_R    3 0 -0.47000
ATOM    2083 HN    GLN A  218   17.11066  54.34635  15.88580 H___A  1 0  0.31000
ATOM    2084  CA   GLN A  218   17.43557  56.12157  14.92864 C_3    4 0  0.16000
ATOM    2085 HCA   GLN A  218   16.81187  56.78210  14.32176 H_     1 0  0.00000
ATOM    2086  C    GLN A  218   18.59894  55.75564  14.12156 C_2    3 0  0.51000
ATOM    2087  O    GLN A  218   19.14780  54.66312  14.27332 O_2    1 2 -0.51000
ATOM    2088  CB   GLN A  218   17.91082  56.92495  16.18512 C_3    4 0  0.00000
ATOM    2089 HCB   GLN A  218   18.71656  57.60849  15.89746 H_     1 0  0.00000
ATOM    2090 HCB   GLN A  218   18.30877  56.23168  16.93081 H_     1 0  0.00000
ATOM    2091  CG   GLN A  218   16.79943  57.78773  16.83241 C_3    4 0  0.00000
ATOM    2092 HCG   GLN A  218   15.98905  57.13295  17.15463 H_     1 0  0.00000
ATOM    2093 HCG   GLN A  218   16.39839  58.45389  16.06387 H_     1 0  0.00000
ATOM    2094  CD   GLN A  218   17.21678  58.64622  17.96911 C_R    3 0  0.55000
ATOM    2095  OE1  GLN A  218   18.38879  58.74105  18.40773 O_2    1 2 -0.55000
ATOM    2096  NE2  GLN A  218   16.26779  59.40712  18.53111 N_R    3 0 -0.60000
ATOM    2097 HNE2  GLN A  218   16.45539  60.10641  19.15788 H___A  1 0  0.30000
ATOM    2098 HNE2  GLN A  218   15.35116  59.28253  18.25282 H___A  1 0  0.30000
ATOM    2099  N    LEU A  219   19.07815  56.65445  13.29030 N_R    3 0 -0.47000
ATOM    2100 HN    LEU A  219   18.54660  57.44381  13.18843 H___A  1 0  0.31000
ATOM    2101  CA   LEU A  219   20.33502  56.61491  12.59461 C_3    4 0  0.16000
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ATOM    2102 HCA   LEU A  219   20.87264  55.70145  12.85718 H_      1 0  0.00000
ATOM    2103  C    LEU A  219   21.13825  57.79513  13.01711 C_R     3 0  0.51000
ATOM    2104  O    LEU A  219   20.65891  58.94318  12.83849 O_2     1 2 -0.51000
ATOM    2105  CB   LEU A  219   20.14045  56.59655  11.05212 C_3     4 0  0.00000
ATOM    2106 HCB   LEU A  219   19.75488  57.56950  10.73973 H_      1 0  0.00000
ATOM    2107 HCB   LEU A  219   19.35480  55.87499  10.80785 H_      1 0  0.00000
ATOM    2108  CG   LEU A  219   21.45497  56.24571  10.26112 C_3     4 0  0.00000
ATOM    2109 HCG   LEU A  219   22.31645  56.35884  10.92408 H_      1 0  0.00000
ATOM    2110  CD1  LEU A  219   21.46306  54.76779   9.78689 C_3     4 0  0.00000
ATOM    2111 HCD1  LEU A  219   20.62768  54.57178   9.11258 H_      1 0  0.00000
ATOM    2112 HCD1  LEU A  219   22.39332  54.53603   9.26588 H_      1 0  0.00000
ATOM    2113 HCD1  LEU A  219   21.37945  54.10132  10.64533 H_      1 0  0.00000
ATOM    2114  CD2  LEU A  219   21.70870  57.22080   9.08513 C_3     4 0  0.00000
ATOM    2115 HCD2  LEU A  219   21.84890  58.23411   9.46487 H_      1 0  0.00000
ATOM    2116 HCD2  LEU A  219   22.61298  56.93733   8.54695 H_      1 0  0.00000
ATOM    2117 HCD2  LEU A  219   20.86841  57.22107   8.39106 H_      1 0  0.00000
ATOM    2118  N    GLU A  220   22.36814  57.61970  13.55834 N_R     3 0 -0.47000
ATOM    2119 HN    GLU A  220   22.64977  56.70734  13.65571 H___A  1 0  0.31000
ATOM    2120  CA   GLU A  220   23.27684  58.65842  13.98214 C_3     4 0  0.16000
ATOM    2121 HCA   GLU A  220   22.79325  59.62754  13.90328 H_      1 0  0.00000
ATOM    2122  C    GLU A  220   24.49142  58.65655  13.12969 C_R     3 0  0.51000
ATOM    2123  O    GLU A  220   25.10607  57.58478  12.97032 O_2     1 2 -0.51000
ATOM    2124  CB   GLU A  220   23.66835  58.46907  15.47526 C_3     4 0  0.00000
ATOM    2125 HCB   GLU A  220   24.38980  57.65786  15.55184 H_      1 0  0.00000
ATOM    2126 HCB   GLU A  220   22.78358  58.13713  15.99979 H_      1 0  0.00000
ATOM    2127  CG   GLU A  220   24.27829  59.71502  16.19244 C_3     4 0 -0.10000
ATOM    2128 HCG   GLU A  220   24.57851  60.45818  15.45030 H_      1 0  0.00000
ATOM    2129 HCG   GLU A  220   25.19208  59.40099  16.70633 H_      1 0  0.00000
ATOM    2130  CD   GLU A  220   23.43620  60.38984  17.20907 C_R     3 0  0.62000
ATOM    2131  OE1  GLU A  220   22.30990  60.00440  17.60074 O_2     1 2 -0.76000
ATOM    2132  OE2  GLU A  220   23.89169  61.39314  17.79119 O_2     1 2 -0.76000
ATOM    2133  N    GLY A  221   24.96566  59.78252  12.56104 N_R     3 0 -0.47000
ATOM    2134 HN    GLY A  221   24.43746  60.55935  12.71284 H___A  1 0  0.31000
ATOM    2135  CA   GLY A  221   26.17313  59.92967  11.80454 C_3     4 0  0.16000
ATOM    2136 HCA   GLY A  221   25.90884  60.29966  10.82050 H_      1 0  0.00000
ATOM    2137 HCA   GLY A  221   26.68332  58.97911  11.65418 H_      1 0  0.00000
ATOM    2138  C    GLY A  221   27.08820  60.90173  12.44098 C_R     3 0  0.51000
ATOM    2139  O    GLY A  221   26.66312  62.05948  12.65300 O_2     1 2 -0.51000
ATOM    2140  N    LEU A  222   28.35113  60.54822  12.77840 N_R     3 0 -0.47000
ATOM    2141 HN    LEU A  222   28.61673  59.66076  12.54131 H___A  1 0  0.31000
ATOM    2142  CA   LEU A  222   29.33158  61.35854  13.45312 C_3     4 0  0.16000
ATOM    2143 HCA   LEU A  222   28.94090  62.36375  13.60337 H_      1 0  0.00000
ATOM    2144  C    LEU A  222   30.57840  61.45315  12.64166 C_R     3 0  0.51000
ATOM    2145  O    LEU A  222   31.14961  60.40369  12.25835 O_2     1 2 -0.51000
ATOM    2146  CB   LEU A  222   29.59337  60.75643  14.86883 C_3     4 0  0.00000
ATOM    2147 HCB   LEU A  222   29.83022  59.69946  14.74059 H_      1 0  0.00000
ATOM    2148 HCB   LEU A  222   28.66200  60.79802  15.44394 H_      1 0  0.00000
ATOM    2149  CG   LEU A  222   30.73430  61.43129  15.70069 C_3     4 0  0.00000
ATOM    2150 HCG   LEU A  222   31.60525  61.53360  15.05794 H_      1 0  0.00000
ATOM    2151  CD1  LEU A  222   30.35769  62.84919  16.20403 C_3     4 0  0.00000
ATOM    2152 HCD1  LEU A  222   29.48052  62.80366  16.84948 H_      1 0  0.00000
ATOM    2153 HCD1  LEU A  222   31.18369  63.28396  16.76807 H_      1 0  0.00000
ATOM    2154 HCD1  LEU A  222   30.14444  63.51053  15.36845 H_      1 0  0.00000
ATOM    2155  CD2  LEU A  222   31.18361  60.55146  16.89427 C_3     4 0  0.00000
ATOM    2156 HCD2  LEU A  222   31.50839  59.56741  16.55794 H_      1 0  0.00000
ATOM    2157 HCD2  LEU A  222   32.01456  61.02306  17.41828 H_      1 0  0.00000
ATOM    2158 HCD2  LEU A  222   30.36651  60.42015  17.59246 H_      1 0  0.00000
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ATOM    2159  N    VAL A  223   31.10799  62.66826  12.35180 N_R    3 0 -0.47000
ATOM    2160 HN    VAL A  223   30.60894  63.42754  12.65830 H___A  1 0  0.31000
ATOM    2161  CA   VAL A  223   32.33927  62.93226  11.64133 C_3    4 0  0.16000
ATOM    2162 HCA   VAL A  223   32.86895  61.99919  11.44442 H_     1 0  0.00000
ATOM    2163  C    VAL A  223   33.22664  63.78705  12.47433 C_R    3 0  0.51000
ATOM    2164  O    VAL A  223   32.77978  64.89173  12.85943 O_2    1 2 -0.51000
ATOM    2165  CB   VAL A  223   32.03632  63.60525  10.26106 C_3    4 0  0.00000
ATOM    2166 HCB   VAL A  223   31.44572  64.50406  10.45561 H_     1 0  0.00000
ATOM    2167  CG1  VAL A  223   33.31959  64.06173   9.50317 C_3    4 0  0.00000
ATOM    2168 HCG1  VAL A  223   34.00349  63.22679   9.36651 H_     1 0  0.00000
ATOM    2169 HCG1  VAL A  223   33.06560  64.47620   8.52703 H_     1 0  0.00000
ATOM    2170 HCG1  VAL A  223   33.84322  64.83701  10.06141 H_     1 0  0.00000
ATOM    2171  CG2  VAL A  223   31.18150  62.67202   9.36020 C_3    4 0  0.00000
ATOM    2172 HCG2  VAL A  223   30.20530  62.50171   9.81541 H_     1 0  0.00000
ATOM    2173 HCG2  VAL A  223   31.02069  63.11914   8.38041 H_     1 0  0.00000
ATOM    2174 HCG2  VAL A  223   31.67284  61.71019   9.22027 H_     1 0  0.00000
ATOM    2175  N    VAL A  224   34.50200  63.41788  12.75398 N_R    3 0 -0.47000
ATOM    2176 HN    VAL A  224   34.80256  62.60667  12.33670 H___A  1 0  0.31000
ATOM    2177  CA   VAL A  224   35.43446  64.15352  13.58523 C_3    4 0  0.16000
ATOM    2178 HCA   VAL A  224   35.04336  65.15553  13.77725 H_     1 0  0.00000
ATOM    2179  C    VAL A  224   36.73908  64.32825  12.88587 C_R    3 0  0.51000
ATOM    2180  O    VAL A  224   37.21827  63.36298  12.24099 O_2    1 2 -0.51000
ATOM    2181  CB   VAL A  224   35.63488  63.47303  14.98571 C_3    4 0  0.00000
ATOM    2182 HCB   VAL A  224   36.10688  62.49726  14.82769 H_     1 0  0.00000
ATOM    2183  CG1  VAL A  224   36.55803  64.29436  15.93670 C_3    4 0  0.00000
ATOM    2184 HCG1  VAL A  224   36.14198  65.28669  16.11546 H_     1 0  0.00000
ATOM    2185 HCG1  VAL A  224   36.66405  63.78825  16.89541 H_     1 0  0.00000
ATOM    2186 HCG1  VAL A  224   37.55546  64.40539  15.51385 H_     1 0  0.00000
ATOM    2187  CG2  VAL A  224   34.28262  63.22475  15.70931 C_3    4 0  0.00000
ATOM    2188 HCG2  VAL A  224   33.66722  62.55210  15.11808 H_     1 0  0.00000
ATOM    2189 HCG2  VAL A  224   34.44133  62.76019  16.68335 H_     1 0  0.00000
ATOM    2190 HCG2  VAL A  224   33.73998  64.15989  15.85505 H_     1 0  0.00000
ATOM    2191  N    GLY A  225   37.42415  65.49573  13.00122 N_R    3 0 -0.47000
ATOM    2192 HN    GLY A  225   37.00686  66.20201  13.49516 H___A  1 0  0.31000
ATOM    2193  CA   GLY A  225   38.74611  65.73366  12.50434 C_3    4 0  0.16000
ATOM    2194 HCA   GLY A  225   38.78430  65.45397  11.44861 H_     1 0  0.00000
ATOM    2195 HCA   GLY A  225   39.43312  65.09116  13.05924 H_     1 0  0.00000
ATOM    2196  C    GLY A  225   39.23476  67.13202  12.62163 C_R    3 0  0.51000
ATOM    2197  O    GLY A  225   38.52569  68.05865  13.08770 O_2    1 2 -0.51000
ATOM    2198  N    GLU A  226   40.48260  67.41903  12.18704 N_R    3 0 -0.47000
ATOM    2199 HN    GLU A  226   41.01284  66.68534  11.83766 H___A  1 0  0.31000
ATOM    2200  CA   GLU A  226   41.07797  68.72700  12.16005 C_3    4 0  0.16000
ATOM    2201 HCA   GLU A  226   40.99973  69.15026  13.16688 H_     1 0  0.00000
ATOM    2202  C    GLU A  226   40.37801  69.61533  11.18766 C_R    3 0  0.51000
ATOM    2203  O    GLU A  226   40.23549  69.24445   9.99785 O_2    1 2 -0.51000
ATOM    2204  CB   GLU A  226   42.59415  68.57669  11.84124 C_3    4 0  0.00000
ATOM    2205 HCB   GLU A  226   42.71755  68.17339  10.83135 H_     1 0  0.00000
ATOM    2206 HCB   GLU A  226   43.01839  67.85111  12.54273 H_     1 0  0.00000
ATOM    2207  CG   GLU A  226   43.40341  69.89933  11.96449 C_3    4 0 -0.10000
ATOM    2208 HCG   GLU A  226   43.22337  70.33616  12.94985 H_     1 0  0.00000
ATOM    2209 HCG   GLU A  226   43.04783  70.60541  11.21045 H_     1 0  0.00000
ATOM    2210  CD   GLU A  226   44.86530  69.75075  11.79381 C_R    3 0  0.62000
ATOM    2211  OE1  GLU A  226   45.41071  68.64433  11.57924 O_2    1 2 -0.76000
ATOM    2212  OE2  GLU A  226   45.59902  70.76177  11.86286 O_2    1 2 -0.76000
ATOM    2213  N    GLY A  227   39.87368  70.80730  11.58568 N_R    3 0 -0.47000
ATOM    2214 HN    GLY A  227   39.98261  71.04355  12.51971 H___A  1 0  0.31000
ATOM    2215  CA   GLY A  227   39.23203  71.76129  10.72950 C_3    4 0  0.16000
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ATOM    2216 HCA   GLY A  227   39.87632  71.93635   9.86302 H_     1 0  0.00000
ATOM    2217 HCA   GLY A  227   39.17552  72.70079  11.28297 H_     1 0  0.00000
ATOM    2218  C    GLY A  227   37.86487  71.43725  10.24951 C_R    3 0  0.51000
ATOM    2219  O    GLY A  227   37.34893  72.21428   9.40997 O_2    1 2 -0.51000
ATOM    2220  N    ILE A  228   37.15729  70.36378  10.68212 N_R    3 0 -0.47000
ATOM    2221 HN    ILE A  228   37.57536  69.79103  11.34334 H___A  1 0  0.31000
ATOM    2222  CA   ILE A  228   35.83284  70.00842  10.22259 C_3    4 0  0.16000
ATOM    2223 HCA   ILE A  228   35.87685  69.92954   9.13383 H_     1 0  0.00000
ATOM    2224  C    ILE A  228   34.82415  71.06579  10.55634 C_R    3 0  0.51000
ATOM    2225  O    ILE A  228   34.59150  71.32515  11.75838 O_2    1 2 -0.51000
ATOM    2226  CB   ILE A  228   35.45703  68.58789  10.77783 C_3    4 0  0.00000
ATOM    2227 HCB   ILE A  228   35.59920  68.62663  11.86459 H_     1 0  0.00000
ATOM    2228  CG1  ILE A  228   36.39303  67.44543  10.25674 C_3    4 0  0.00000
ATOM    2229 HCG1  ILE A  228   36.16813  66.53462  10.81714 H_     1 0  0.00000
ATOM    2230 HCG1  ILE A  228   37.43041  67.70502  10.47726 H_     1 0  0.00000
ATOM    2231  CG2  ILE A  228   33.96438  68.20766  10.56582 C_3    4 0  0.00000
ATOM    2232 HCG2  ILE A  228   33.70362  68.26187   9.50863 H_     1 0  0.00000
ATOM    2233 HCG2  ILE A  228   33.76710  67.19888  10.93015 H_     1 0  0.00000
ATOM    2234 HCG2  ILE A  228   33.31773  68.88618  11.12113 H_     1 0  0.00000
ATOM    2235  CD1  ILE A  228   36.31134  67.08847   8.75170 C_3    4 0  0.00000
ATOM    2236 HCD1  ILE A  228   36.58177  67.94160   8.13199 H_     1 0  0.00000
ATOM    2237 HCD1  ILE A  228   37.00755  66.27742   8.53546 H_     1 0  0.00000
ATOM    2238 HCD1  ILE A  228   35.30922  66.75446   8.48519 H_     1 0  0.00000
ATOM    2239  N    ALA A  229   34.16722  71.73538   9.57266 N_R    3 0 -0.47000
ATOM    2240 HN    ALA A  229   34.40665  71.49804   8.66676 H___A  1 0  0.31000
ATOM    2241  CA   ALA A  229   33.18904  72.78697   9.72902 C_3    4 0  0.16000
ATOM    2242 HCA   ALA A  229   33.00430  72.97137  10.78998 H_     1 0  0.00000
ATOM    2243  C    ALA A  229   31.86448  72.49630   9.09731 C_R    3 0  0.51000
ATOM    2244  O    ALA A  229   31.75243  71.60004   8.22356 O_2    1 2 -0.51000
ATOM    2245  CB   ALA A  229   33.78723  74.08668   9.13553 C_3    4 0  0.00000
ATOM    2246 HCB   ALA A  229   34.00399  73.96033   8.07256 H_     1 0  0.00000
ATOM    2247 HCB   ALA A  229   33.09395  74.92204   9.25414 H_     1 0  0.00000
ATOM    2248 HCB   ALA A  229   34.71466  74.34141   9.65220 H_     1 0  0.00000
ATOM    2249  N    MET A  230   30.78390  73.24992   9.44171 N_R    3 0 -0.47000
ATOM    2250 HN    MET A  230   30.95072  73.94814  10.09421 H___A  1 0  0.31000
ATOM    2251  CA   MET A  230   29.41099  73.07021   9.02224 C_3    4 0  0.16000
ATOM    2252 HCA   MET A  230   29.05735  72.17013   9.53276 H_     1 0  0.00000
ATOM    2253  C    MET A  230   29.20614  72.86443   7.56256 C_R    3 0  0.51000
ATOM    2254  O    MET A  230   28.26857  72.12928   7.17098 O_2    1 2 -0.51000
ATOM    2255  CB   MET A  230   28.51494  74.26365   9.47699 C_3    4 0  0.00000
ATOM    2256 HCB   MET A  230   27.52010  74.15978   9.03239 H_     1 0  0.00000
ATOM    2257 HCB   MET A  230   28.94490  75.20056   9.10881 H_     1 0  0.00000
ATOM    2258  CG   MET A  230   28.33194  74.36147  11.01098 C_3    4 0  0.04000
ATOM    2259 HCG   MET A  230   29.29494  74.58382  11.47295 H_     1 0  0.00000
ATOM    2260 HCG   MET A  230   27.97365  73.40980  11.40112 H_     1 0  0.00000
ATOM    2261  SD   MET A  230   27.17991  75.67319  11.49481 S_3    2 0 -0.09000
ATOM    2262  CE   MET A  230   25.63190  74.74080  11.41186 C_3    4 0  0.05000
ATOM    2263 HCE   MET A  230   25.65892  73.90419  12.11151 H_     1 0  0.00000
ATOM    2264 HCE   MET A  230   24.80804  75.39970  11.68578 H_     1 0  0.00000
ATOM    2265 HCE   MET A  230   25.46446  74.36700  10.40182 H_     1 0  0.00000
ATOM    2266  N    ALA A  231   30.03010  73.43007   6.65264 N_R    3 0 -0.47000
ATOM    2267 HN    ALA A  231   30.69653  74.04792   6.98927 H___A  1 0  0.31000
ATOM    2268  CA   ALA A  231   30.01747  73.17044   5.23976 C_3    4 0  0.16000
ATOM    2269 HCA   ALA A  231   29.13906  73.67218   4.81832 H_     1 0  0.00000
ATOM    2270  C    ALA A  231   29.96519  71.71898   4.90121 C_R    3 0  0.51000
ATOM    2271  O    ALA A  231   29.21089  71.34134   3.97478 O_2    1 2 -0.51000
ATOM    2272  CB   ALA A  231   31.27479  73.81293   4.60829 C_3    4 0  0.00000
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ATOM   2273 HCB  ALA A 231   32.18243  73.39589   5.05042 H_     1 0  0.00000
ATOM   2274 HCB  ALA A 231   31.29461  73.63634   3.53090 H_     1 0  0.00000
ATOM   2275 HCB  ALA A 231   31.26818  74.89164   4.77707 H_     1 0  0.00000
ATOM   2276  N   HSD A 232   30.64495  70.80719   5.63837 N_R    3 0 -0.47000
ATOM   2277 HN   HSD A 232   31.07971  71.11175   6.43799 H___A  1 0  0.31000
ATOM   2278  CA  HSD A 232   30.67699  69.39172   5.37232 C_3    4 0  0.16000
ATOM   2279 HCA  HSD A 232   30.66812  69.23511   4.28648 H_     1 0  0.00000
ATOM   2280  C   HSD A 232   29.49347  68.68143   5.94071 C_R    3 0  0.51000
ATOM   2281  O   HSD A 232   29.15922  67.57246   5.45934 O_2    1 2 -0.51000
ATOM   2282  CB  HSD A 232   32.00056  68.79221   5.92067 C_3    4 0  0.10000
ATOM   2283 HCB  HSD A 232   32.04125  67.72162   5.70251 H_     1 0  0.00000
ATOM   2284 HCB  HSD A 232   32.02813  68.92188   7.00560 H_     1 0  0.00000
ATOM   2285  CG  HSD A 232   33.20016  69.41797   5.32815 C_R    3 0  0.22000
ATOM   2286  ND1 HSD A 232   33.52381  69.40926   4.02377 N_R    2 1 -0.70000
ATOM   2287  CD2 HSD A 232   34.19007  70.12462   6.00269 C_R    3 0  0.04000
ATOM   2288 HCD2 HSD A 232   34.23250  70.30661   7.00396 H_     1 0  0.00000
ATOM   2289  CE1 HSD A 232   34.67618  70.08579   3.89269 C_R    3 0  0.38000
ATOM   2290 HCE1 HSD A 232   35.16856  70.24242   3.01255 H_     1 0  0.00000
ATOM   2291  NE2 HSD A 232   35.08109  70.52445   5.09097 N_R    3 0 -0.36000
ATOM   2292 HNE2 HSD A 232   35.88445  71.03845   5.26177 H___A  1 0  0.32000
ATOM   2293  N   LEU A 233   28.71878  69.25107   6.89675 N_R    3 0 -0.47000
ATOM   2294 HN   LEU A 233   28.89258  70.16584   7.12534 H___A  1 0  0.31000
ATOM   2295  CA  LEU A 233   27.49333  68.72145   7.42743 C_3    4 0  0.16000
ATOM   2296 HCA  LEU A 233   27.57876  67.63843   7.55165 H_     1 0  0.00000
ATOM   2297  C   LEU A 233   26.43503  69.04048   6.43927 C_R    3 0  0.51000
ATOM   2298  O   LEU A 233   25.68164  68.13605   6.01042 O_2    1 2 -0.51000
ATOM   2299  CB  LEU A 233   27.20713  69.34899   8.82738 C_3    4 0  0.00000
ATOM   2300 HCB  LEU A 233   27.38126  70.42355   8.76558 H_     1 0  0.00000
ATOM   2301 HCB  LEU A 233   27.93920  68.95509   9.53505 H_     1 0  0.00000
ATOM   2302  CG  LEU A 233   25.77385  69.15100   9.41527 C_3    4 0  0.00000
ATOM   2303 HCG  LEU A 233   25.05529  69.54561   8.69362 H_     1 0  0.00000
ATOM   2304  CD1 LEU A 233   25.41118  67.66327   9.65708 C_3    4 0  0.00000
ATOM   2305 HCD1 LEU A 233   26.04546  67.23450  10.43139 H_     1 0  0.00000
ATOM   2306 HCD1 LEU A 233   24.37124  67.58566   9.97180 H_     1 0  0.00000
ATOM   2307 HCD1 LEU A 233   25.52472  67.07637   8.74656 H_     1 0  0.00000
ATOM   2308  CD2 LEU A 233   25.59825  69.97861  10.71896 C_3    4 0  0.00000
ATOM   2309 HCD2 LEU A 233   25.76338  71.03957  10.52001 H_     1 0  0.00000
ATOM   2310 HCD2 LEU A 233   24.58675  69.86731  11.10968 H_     1 0  0.00000
ATOM   2311 HCD2 LEU A 233   26.30635  69.65292  11.48315 H_     1 0  0.00000
ATOM   2312  N   LYS A 234   26.34877  70.29909   5.94160 N_R    3 0 -0.47000
ATOM   2313 HN   LYS A 234   26.94801  70.94616   6.31812 H___A  1 0  0.31000
ATOM   2314  CA  LYS A 234   25.49269  70.67787   4.85353 C_3    4 0  0.16000
ATOM   2315 HCA  LYS A 234   24.46298  70.47731   5.16984 H_     1 0  0.00000
ATOM   2316  C   LYS A 234   25.77752  69.84394   3.65042 C_R    3 0  0.51000
ATOM   2317  O   LYS A 234   24.81373  69.25554   3.11619 O_2    1 2 -0.51000
ATOM   2318  CB  LYS A 234   25.58390  72.19719   4.54692 C_3    4 0  0.00000
ATOM   2319 HCB  LYS A 234   25.02292  72.39721   3.63069 H_     1 0  0.00000
ATOM   2320 HCB  LYS A 234   26.62614  72.47509   4.37105 H_     1 0  0.00000
ATOM   2321  CG  LYS A 234   24.99869  73.07131   5.69255 C_3    4 0  0.00000
ATOM   2322 HCG  LYS A 234   25.59395  72.90794   6.59396 H_     1 0  0.00000
ATOM   2323 HCG  LYS A 234   23.97773  72.75168   5.91420 H_     1 0  0.00000
ATOM   2324  CD  LYS A 234   24.98523  74.59392   5.39396 C_3    4 0  0.00000
ATOM   2325 HCD  LYS A 234   25.97038  74.90417   5.03555 H_     1 0  0.00000
ATOM   2326 HCD  LYS A 234   24.79379  75.11999   6.33365 H_     1 0  0.00000
ATOM   2327  CE  LYS A 234   23.90273  75.02660   4.37332 C_3    4 0  0.31000
ATOM   2328 HCE  LYS A 234   22.91429  74.70610   4.71207 H_     1 0  0.00000
ATOM   2329 HCE  LYS A 234   24.09833  74.58565   3.39430 H_     1 0  0.00000
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ATOM   2330  NZ   LYS A 234   23.88763  76.48510   4.22071 N_3    4 0 -0.30000
ATOM   2331 HNZ   LYS A 234   24.80041  76.80321   3.88985 H___A  1 0  0.33000
ATOM   2332 HNZ   LYS A 234   23.17036  76.74918   3.54289 H___A  1 0  0.33000
ATOM   2333 HNZ   LYS A 234   23.68053  76.92099   5.12142 H___A  1 0  0.33000
ATOM   2334  N    GLY A 235   27.03665  69.62738   3.19625 N_R    3 0 -0.47000
ATOM   2335 HN    GLY A 235   27.74116  70.17923   3.53206 H___A  1 0  0.31000
ATOM   2336  CA   GLY A 235   27.41217  68.64701   2.21762 C_3    4 0  0.16000
ATOM   2337 HCA   GLY A 235   28.50094  68.58581   2.20913 H_     1 0  0.00000
ATOM   2338 HCA   GLY A 235   27.09787  69.01231   1.23687 H_     1 0  0.00000
ATOM   2339  C    GLY A 235   26.87541  67.28150   2.45831 C_R    3 0  0.51000
ATOM   2340  O    GLY A 235   26.14261  66.76638   1.58358 O_2    1 2 -0.51000
ATOM   2341  N    ALA A 236   27.12623  66.59942   3.60403 N_R    3 0 -0.47000
ATOM   2342 HN    ALA A 236   27.75975  66.97107   4.22091 H___A  1 0  0.31000
ATOM   2343  CA   ALA A 236   26.55537  65.31557   3.93682 C_3    4 0  0.16000
ATOM   2344 HCA   ALA A 236   26.99173  64.58746   3.24346 H_     1 0  0.00000
ATOM   2345  C    ALA A 236   25.06610  65.24982   3.82254 C_R    3 0  0.51000
ATOM   2346  O    ALA A 236   24.54838  64.35365   3.11442 O_2    1 2 -0.51000
ATOM   2347  CB   ALA A 236   27.00459  64.89403   5.35736 C_3    4 0  0.00000
ATOM   2348 HCB   ALA A 236   26.66498  65.61185   6.10414 H_     1 0  0.00000
ATOM   2349 HCB   ALA A 236   26.59920  63.91205   5.60930 H_     1 0  0.00000
ATOM   2350 HCB   ALA A 236   28.09330  64.83469   5.40094 H_     1 0  0.00000
ATOM   2351  N    ILE A 237   24.26352  66.14547   4.44931 N_R    3 0 -0.47000
ATOM   2352 HN    ILE A 237   24.70102  66.82067   4.96726 H___A  1 0  0.31000
ATOM   2353  CA   ILE A 237   22.81911  66.14544   4.37308 C_3    4 0  0.16000
ATOM   2354 HCA   ILE A 237   22.49786  65.12796   4.60259 H_     1 0  0.00000
ATOM   2355  C    ILE A 237   22.32871  66.44694   2.98880 C_R    3 0  0.51000
ATOM   2356  O    ILE A 237   21.33048  65.82946   2.54537 O_2    1 2 -0.51000
ATOM   2357  CB   ILE A 237   22.18207  67.04654   5.48543 C_3    4 0  0.00000
ATOM   2358 HCB   ILE A 237   22.50156  68.07387   5.27770 H_     1 0  0.00000
ATOM   2359  CG1  ILE A 237   22.67358  66.69832   6.93421 C_3    4 0  0.00000
ATOM   2360 HCG1  ILE A 237   22.15356  67.33439   7.65669 H_     1 0  0.00000
ATOM   2361 HCG1  ILE A 237   23.72976  66.94593   7.01900 H_     1 0  0.00000
ATOM   2362  CG2  ILE A 237   20.62338  67.05638   5.45402 C_3    4 0  0.00000
ATOM   2363 HCG2  ILE A 237   20.22242  66.05459   5.60593 H_     1 0  0.00000
ATOM   2364 HCG2  ILE A 237   20.23333  67.71874   6.22678 H_     1 0  0.00000
ATOM   2365 HCG2  ILE A 237   20.25610  67.42547   4.50318 H_     1 0  0.00000
ATOM   2366  CD1  ILE A 237   22.51262  65.22931   7.39731 C_3    4 0  0.00000
ATOM   2367 HCD1  ILE A 237   23.14124  64.56255   6.80785 H_     1 0  0.00000
ATOM   2368 HCD1  ILE A 237   22.81846  65.14849   8.43820 H_     1 0  0.00000
ATOM   2369 HCD1  ILE A 237   21.47749  64.90530   7.31761 H_     1 0  0.00000
ATOM   2370  N    TYR A 238   22.93804  67.34157   2.17329 N_R    3 0 -0.47000
ATOM   2371 HN    TYR A 238   23.61409  67.90420   2.54002 H___A  1 0  0.31000
ATOM   2372  CA   TYR A 238   22.65476  67.52562   0.77575 C_3    4 0  0.16000
ATOM   2373 HCA   TYR A 238   21.60048  67.80551   0.70268 H_     1 0  0.00000
ATOM   2374  C    TYR A 238   22.87323  66.27072   0.00045 C_R    3 0  0.51000
ATOM   2375  O    TYR A 238   21.93109  65.82940  -0.69191 O_2    1 2 -0.51000
ATOM   2376  CB   TYR A 238   23.48180  68.71630   0.20571 C_3    4 0  0.00000
ATOM   2377 HCB   TYR A 238   24.54534  68.47760   0.27562 H_     1 0  0.00000
ATOM   2378 HCB   TYR A 238   23.31628  69.60419   0.82246 H_     1 0  0.00000
ATOM   2379  CG   TYR A 238   23.11232  69.04721  -1.19783 C_R    3 0  0.00000
ATOM   2380  CD1  TYR A 238   23.96673  68.70936  -2.27357 C_R    3 0  0.00000
ATOM   2381 HCD1  TYR A 238   24.88465  68.29425  -2.09398 H_     1 0  0.00000
ATOM   2382  CD2  TYR A 238   21.87742  69.67718  -1.48320 C_R    3 0  0.00000
ATOM   2383 HCD2  TYR A 238   21.25201  69.95906  -0.72398 H_     1 0  0.00000
ATOM   2384  CE1  TYR A 238   23.55781  68.91747  -3.60490 C_R    3 0  0.00000
ATOM   2385 HCE1  TYR A 238   24.17428  68.64051  -4.37282 H_     1 0  0.00000
ATOM   2386  CE2  TYR A 238   21.48141  69.90908  -2.81364 C_R    3 0  0.00000
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ATOM    2387 HCE2  TYR A  238   20.58367  70.35551  -3.00763 H_     1 0  0.00000
ATOM    2388  CZ   TYR A  238   22.30059  69.48913  -3.87529 C_R    3 0  0.11000
ATOM    2389  OH   TYR A  238   21.85570  69.60023  -5.14626 O_R    2 2 -0.54000
ATOM    2390 HOH   TYR A  238   22.37379  69.19276  -5.87313 H___A  1 0  0.43000
ATOM    2391  N    GLU A  239   24.03113  65.57418   0.04444 N_R    3 0 -0.47000
ATOM    2392 HN    GLU A  239   24.74646  65.94220   0.55972 H___A  1 0  0.31000
ATOM    2393  CA   GLU A  239   24.24606  64.32536  -0.64158 C_3    4 0  0.16000
ATOM    2394 HCA   GLU A  239   24.02126  64.51755  -1.69262 H_     1 0  0.00000
ATOM    2395  C    GLU A  239   23.31657  63.24162  -0.19589 C_R    3 0  0.51000
ATOM    2396  O    GLU A  239   22.80457  62.49842  -1.06615 O_2    1 2 -0.51000
ATOM    2397  CB   GLU A  239   25.73648  63.89478  -0.58384 C_3    4 0  0.00000
ATOM    2398 HCB   GLU A  239   25.83742  62.88215  -0.98697 H_     1 0  0.00000
ATOM    2399 HCB   GLU A  239   26.04240  63.86643   0.46339 H_     1 0  0.00000
ATOM    2400  CG   GLU A  239   26.71375  64.82478  -1.36229 C_3    4 0 -0.10000
ATOM    2401 HCG   GLU A  239   27.71461  64.38914  -1.32444 H_     1 0  0.00000
ATOM    2402 HCG   GLU A  239   26.76183  65.79226  -0.85885 H_     1 0  0.00000
ATOM    2403  CD   GLU A  239   26.36232  65.02877  -2.78442 C_R    3 0  0.62000
ATOM    2404  OE1  GLU A  239   26.27944  64.05912  -3.56968 O_2    1 2 -0.76000
ATOM    2405  OE2  GLU A  239   26.12807  66.17533  -3.22865 O_2    1 2 -0.76000
ATOM    2406  N    LEU A  240   22.92125  63.09952   1.09544 N_R    3 0 -0.47000
ATOM    2407 HN    LEU A  240   23.42621  63.56667   1.75968 H___A  1 0  0.31000
ATOM    2408  CA   LEU A  240   21.79958  62.29636   1.52485 C_3    4 0  0.16000
ATOM    2409 HCA   LEU A  240   22.05900  61.25698   1.30684 H_     1 0  0.00000
ATOM    2410  C    LEU A  240   20.55277  62.65841   0.78597 C_R    3 0  0.51000
ATOM    2411  O    LEU A  240   19.95779  61.76836   0.13719 O_2    1 2 -0.51000
ATOM    2412  CB   LEU A  240   21.59078  62.40675   3.06687 C_3    4 0  0.00000
ATOM    2413 HCB   LEU A  240   21.50449  63.46211   3.31314 H_     1 0  0.00000
ATOM    2414 HCB   LEU A  240   22.49139  62.03704   3.56665 H_     1 0  0.00000
ATOM    2415  CG   LEU A  240   20.33607  61.67927   3.65741 C_3    4 0  0.00000
ATOM    2416 HCG   LEU A  240   19.46173  61.98371   3.08097 H_     1 0  0.00000
ATOM    2417  CD1  LEU A  240   20.44322  60.13564   3.54673 C_3    4 0  0.00000
ATOM    2418 HCD1  LEU A  240   21.32163  59.76744   4.07374 H_     1 0  0.00000
ATOM    2419 HCD1  LEU A  240   19.55831  59.66840   3.97451 H_     1 0  0.00000
ATOM    2420 HCD1  LEU A  240   20.50981  59.82712   2.50416 H_     1 0  0.00000
ATOM    2421  CD2  LEU A  240   20.03832  62.12349   5.11627 C_3    4 0  0.00000
ATOM    2422 HCD2  LEU A  240   19.85857  63.19988   5.15394 H_     1 0  0.00000
ATOM    2423 HCD2  LEU A  240   19.14530  61.62139   5.49179 H_     1 0  0.00000
ATOM    2424 HCD2  LEU A  240   20.86879  61.88935   5.77894 H_     1 0  0.00000
ATOM    2425  N    ALA A  241   20.06276  63.92321   0.78190 N_R    3 0 -0.47000
ATOM    2426 HN    ALA A  241   20.50704  64.56399   1.33664 H___A  1 0  0.31000
ATOM    2427  CA   ALA A  241   18.91442  64.36607   0.03060 C_3    4 0  0.16000
ATOM    2428 HCA   ALA A  241   18.03712  63.90384   0.49557 H_     1 0  0.00000
ATOM    2429  C    ALA A  241   18.95628  63.97456  -1.40856 C_R    3 0  0.51000
ATOM    2430  O    ALA A  241   17.96696  63.39162  -1.90444 O_2    1 2 -0.51000
ATOM    2431  CB   ALA A  241   18.73780  65.89770   0.16727 C_3    4 0  0.00000
ATOM    2432 HCB   ALA A  241   19.59103  66.44023  -0.22792 H_     1 0  0.00000
ATOM    2433 HCB   ALA A  241   17.85527  66.22662  -0.38250 H_     1 0  0.00000
ATOM    2434 HCB   ALA A  241   18.61896  66.16261   1.21854 H_     1 0  0.00000
ATOM    2435  N    GLN A  242   20.06926  64.20523  -2.14076 N_R    3 0 -0.47000
ATOM    2436 HN    GLN A  242   20.75014  64.70068  -1.69012 H___A  1 0  0.31000
ATOM    2437  CA   GLN A  242   20.31250  63.79520  -3.50074 C_3    4 0  0.16000
ATOM    2438 HCA   GLN A  242   19.57112  64.29168  -4.12900 H_     1 0  0.00000
ATOM    2439  C    GLN A  242   20.19654  62.34771  -3.70005 C_2    3 0  0.51000
ATOM    2440  O    GLN A  242   19.46141  61.92258  -4.58239 O_2    1 2 -0.51000
ATOM    2441  CB   GLN A  242   21.71715  64.29153  -3.95755 C_3    4 0  0.00000
ATOM    2442 HCB   GLN A  242   21.94026  63.90058  -4.95604 H_     1 0  0.00000
ATOM    2443 HCB   GLN A  242   22.46523  63.86588  -3.28927 H_     1 0  0.00000
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ATOM    2444  CG   GLN A  242   21.90881  65.83603  -3.98043 C_3    4 0  0.00000
ATOM    2445 HCG   GLN A  242   22.97960  66.04921  -3.93117 H_     1 0  0.00000
ATOM    2446 HCG   GLN A  242   21.44783  66.30444  -3.11063 H_     1 0  0.00000
ATOM    2447  CD   GLN A  242   21.34760  66.45630  -5.19295 C_R    3 0  0.55000
ATOM    2448  OE1  GLN A  242   22.06890  66.82257  -6.14640 O_2    1 2 -0.55000
ATOM    2449  NE2  GLN A  242   20.03247  66.65777  -5.31428 N_R    3 0 -0.60000
ATOM    2450 HNE2  GLN A  242   19.66136  66.98285  -6.12447 H___A  1 0  0.30000
ATOM    2451 HNE2  GLN A  242   19.41762  66.46015  -4.61587 H___A  1 0  0.30000
ATOM    2452  N    ALA A  243   20.86400  61.49367  -2.94128 N_R    3 0 -0.47000
ATOM    2453 HN    ALA A  243   21.48251  61.85643  -2.30754 H___A  1 0  0.31000
ATOM    2454  CA   ALA A  243   20.75470  60.05871  -2.98902 C_3    4 0  0.16000
ATOM    2455 HCA   ALA A  243   21.08202  59.73324  -3.98365 H_     1 0  0.00000
ATOM    2456  C    ALA A  243   19.36519  59.56730  -2.75162 C_R    3 0  0.51000
ATOM    2457  O    ALA A  243   18.88226  58.69546  -3.51383 O_2    1 2 -0.51000
ATOM    2458  CB   ALA A  243   21.73653  59.43507  -1.97043 C_3    4 0  0.00000
ATOM    2459 HCB   ALA A  243   21.49868  59.75262  -0.95487 H_     1 0  0.00000
ATOM    2460 HCB   ALA A  243   21.68447  58.34774  -2.02203 H_     1 0  0.00000
ATOM    2461 HCB   ALA A  243   22.75975  59.73755  -2.20090 H_     1 0  0.00000
ATOM    2462  N    LEU A  244   18.61213  60.06148  -1.73943 N_R    3 0 -0.47000
ATOM    2463 HN    LEU A  244   19.04337  60.66694  -1.13786 H___A  1 0  0.31000
ATOM    2464  CA   LEU A  244   17.23215  59.73719  -1.51134 C_3    4 0  0.16000
ATOM    2465 HCA   LEU A  244   17.17896  58.65634  -1.39444 H_     1 0  0.00000
ATOM    2466  C    LEU A  244   16.34210  60.12409  -2.64839 C_R    3 0  0.51000
ATOM    2467  O    LEU A  244   15.60210  59.24377  -3.15463 O_2    1 2 -0.51000
ATOM    2468  CB   LEU A  244   16.69381  60.37577  -0.19115 C_3    4 0  0.00000
ATOM    2469 HCB   LEU A  244   15.61224  60.21110  -0.13517 H_     1 0  0.00000
ATOM    2470 HCB   LEU A  244   16.85135  61.45783  -0.25358 H_     1 0  0.00000
ATOM    2471  CG   LEU A  244   17.31097  59.85903   1.14882 C_3    4 0  0.00000
ATOM    2472 HCG   LEU A  244   18.39588  59.95811   1.09069 H_     1 0  0.00000
ATOM    2473  CD1  LEU A  244   16.82222  60.74315   2.33354 C_3    4 0  0.00000
ATOM    2474 HCD1  LEU A  244   15.73555  60.70846   2.41765 H_     1 0  0.00000
ATOM    2475 HCD1  LEU A  244   17.25142  60.40069   3.27515 H_     1 0  0.00000
ATOM    2476 HCD1  LEU A  244   17.12185  61.78131   2.18423 H_     1 0  0.00000
ATOM    2477  CD2  LEU A  244   17.00137  58.36356   1.43876 C_3    4 0  0.00000
ATOM    2478 HCD2  LEU A  244   17.42753  57.71809   0.67170 H_     1 0  0.00000
ATOM    2479 HCD2  LEU A  244   17.44112  58.06346   2.39085 H_     1 0  0.00000
ATOM    2480 HCD2  LEU A  244   15.92416  58.19434   1.48114 H_     1 0  0.00000
ATOM    2481  N    PHE A  245   16.26474  61.41111  -3.06540 N_R    3 0 -0.47000
ATOM    2482 HN    PHE A  245   16.86701  62.04053  -2.67045 H___A  1 0  0.31000
ATOM    2483  CA   PHE A  245   15.31720  61.96339  -3.99842 C_3    4 0  0.16000
ATOM    2484 HCA   PHE A  245   14.76868  61.16856  -4.51240 H_     1 0  0.00000
ATOM    2485  C    PHE A  245   15.96821  62.82426  -5.02915 C_R    3 0  0.51000
ATOM    2486  O    PHE A  245   16.94692  63.53351  -4.70326 O_2    1 2 -0.51000
ATOM    2487  CB   PHE A  245   14.28999  62.84791  -3.21693 C_3    4 0  0.00000
ATOM    2488 HCB   PHE A  245   13.46207  63.09929  -3.88496 H_     1 0  0.00000
ATOM    2489 HCB   PHE A  245   14.77026  63.79504  -2.95104 H_     1 0  0.00000
ATOM    2490  CG   PHE A  245   13.71100  62.23502  -1.98649 C_R    3 0  0.00000
ATOM    2491  CD1  PHE A  245   12.91177  61.07015  -2.06592 C_R    3 0  0.00000
ATOM    2492 HCD1  PHE A  245   12.73452  60.62711  -2.97028 H_     1 0  0.00000
ATOM    2493  CD2  PHE A  245   13.93077  62.81634  -0.71290 C_R    3 0  0.00000
ATOM    2494 HCD2  PHE A  245   14.50843  63.65438  -0.61827 H_     1 0  0.00000
ATOM    2495  CE1  PHE A  245   12.33672  60.51241  -0.90779 C_R    3 0  0.00000
ATOM    2496 HCE1  PHE A  245   11.75004  59.67822  -0.97935 H_     1 0  0.00000
ATOM    2497  CE2  PHE A  245   13.36188  62.25496   0.44542 C_R    3 0  0.00000
ATOM    2498 HCE2  PHE A  245   13.52933  62.68433   1.35794 H_     1 0  0.00000
ATOM    2499  CZ   PHE A  245   12.56323  61.10304   0.34736 C_R    3 0  0.00000
ATOM    2500 HCZ   PHE A  245   12.14777  60.69579   1.18733 H_     1 0  0.00000
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ATOM    2501  N    GLY A  246   15.42085  62.97198  -6.26002 N_R    3 0 -0.47000
ATOM    2502 HN    GLY A  246   14.75119  62.32574  -6.53287 H___A  1 0  0.31000
ATOM    2503  CA   GLY A  246   15.67515  64.06701  -7.15519 C_3    4 0  0.16000
ATOM    2504 HCA   GLY A  246   16.24603  64.84643  -6.65608 H_     1 0  0.00000
ATOM    2505 HCA   GLY A  246   14.70180  64.50818  -7.37892 H_     1 0  0.00000
ATOM    2506  C    GLY A  246   16.29654  63.69664  -8.45486 C_R    3 0  0.51000
ATOM    2507  O    GLY A  246   15.68059  62.81963  -9.10801 O_2    1 2 -0.51000
ATOM    2508  N    PRO A  247   17.42413  64.26608  -8.99535 N_R    3 0 -0.29000
ATOM    2509  CA   PRO A  247   18.31139  65.20852  -8.34093 C_3    4 0  0.11000
ATOM    2510 HCA   PRO A  247   18.60018  64.79349  -7.36920 H_     1 0  0.00000
ATOM    2511  C    PRO A  247   17.78364  66.55799  -8.10278 C_2    3 0  0.51000
ATOM    2512  O    PRO A  247   18.50010  67.39458  -7.56706 O_2    1 2 -0.51000
ATOM    2513  CB   PRO A  247   19.57263  65.21655  -9.24408 C_3    4 0  0.00000
ATOM    2514 HCB   PRO A  247   20.26901  64.43550  -8.92161 H_     1 0  0.00000
ATOM    2515 HCB   PRO A  247   20.10769  66.17032  -9.25268 H_     1 0  0.00000
ATOM    2516  CG   PRO A  247   19.03132  64.87190 -10.63478 C_3    4 0  0.00000
ATOM    2517 HCG   PRO A  247   19.78871  64.39176 -11.26041 H_     1 0  0.00000
ATOM    2518 HCG   PRO A  247   18.66978  65.77715 -11.13246 H_     1 0  0.00000
ATOM    2519  CD   PRO A  247   17.85964  63.92939 -10.32125 C_3    4 0  0.18000
ATOM    2520 HCD   PRO A  247   17.06234  64.06753 -11.05760 H_     1 0  0.00000
ATOM    2521 HCD   PRO A  247   18.19834  62.88908 -10.34634 H_     1 0  0.00000
ATOM    2522  N    ASP A  248   16.54616  66.89275  -8.41741 N_R    3 0 -0.47000
ATOM    2523 HN    ASP A  248   16.06907  66.30883  -9.01690 H___A  1 0  0.31000
ATOM    2524  CA   ASP A  248   15.81168  68.08916  -8.09365 C_3    4 0  0.16000
ATOM    2525 HCA   ASP A  248   16.41220  68.94519  -8.41519 H_     1 0  0.00000
ATOM    2526  C    ASP A  248   15.50859  68.27292  -6.62772 C_R    3 0  0.51000
ATOM    2527  O    ASP A  248   14.42224  68.78506  -6.26148 O_2    1 2 -0.51000
ATOM    2528  CB   ASP A  248   14.50063  68.07502  -8.95359 C_3    4 0 -0.10000
ATOM    2529 HCB   ASP A  248   14.06365  69.07748  -8.92949 H_     1 0  0.00000
ATOM    2530 HCB   ASP A  248   13.77310  67.39551  -8.50017 H_     1 0  0.00000
ATOM    2531  CG   ASP A  248   14.65746  67.65906 -10.36762 C_R    3 0  0.62000
ATOM    2532  OD1  ASP A  248   14.53872  68.48887 -11.29630 O_2    1 2 -0.76000
ATOM    2533  OD2  ASP A  248   14.89748  66.46163 -10.65491 O_2    1 2 -0.76000
ATOM    2534  N    SER A  249   16.41707  67.95240  -5.67322 N_R    3 0 -0.47000
ATOM    2535 HN    SER A  249   17.25592  67.67671  -6.04378 H___A  1 0  0.31000
ATOM    2536  CA   SER A  249   16.23244  68.00406  -4.23390 C_3    4 0  0.16000
ATOM    2537 HCA   SER A  249   15.18733  68.23869  -4.01980 H_     1 0  0.00000
ATOM    2538  C    SER A  249   17.02897  69.06688  -3.56525 C_R    3 0  0.51000
ATOM    2539  O    SER A  249   17.91408  69.69490  -4.19008 O_2    1 2 -0.51000
ATOM    2540  CB   SER A  249   16.49236  66.62669  -3.56630 C_3    4 0  0.23000
ATOM    2541 HCB   SER A  249   15.97178  65.85517  -4.13204 H_     1 0  0.00000
ATOM    2542 HCB   SER A  249   16.08580  66.61680  -2.55187 H_     1 0  0.00000
ATOM    2543  OG   SER A  249   17.87710  66.29589  -3.47730 O_3    2 2 -0.66000
ATOM    2544 HOG   SER A  249   18.26917  66.95712  -2.87165 H___A  1 0  0.43000
ATOM    2545  N    LYS A  250   16.76953  69.37846  -2.27022 N_R    3 0 -0.47000
ATOM    2546 HN    LYS A  250   16.09691  68.83766  -1.82566 H___A  1 0  0.31000
ATOM    2547  CA   LYS A  250   17.36015  70.45057  -1.50482 C_3    4 0  0.16000
ATOM    2548 HCA   LYS A  250   18.44532  70.32800  -1.57061 H_     1 0  0.00000
ATOM    2549  C    LYS A  250   17.02833  70.36444  -0.05099 C_R    3 0  0.51000
ATOM    2550  O    LYS A  250   16.18679  69.52746   0.35466 O_2    1 2 -0.51000
ATOM    2551  CB   LYS A  250   16.99564  71.84927  -2.09752 C_3    4 0  0.00000
ATOM    2552 HCB   LYS A  250   17.47042  71.94111  -3.07462 H_     1 0  0.00000
ATOM    2553 HCB   LYS A  250   17.42660  72.63724  -1.47385 H_     1 0  0.00000
ATOM    2554  CG   LYS A  250   15.46936  72.10242  -2.24546 C_3    4 0  0.00000
ATOM    2555 HCG   LYS A  250   15.03594  72.14295  -1.24476 H_     1 0  0.00000
ATOM    2556 HCG   LYS A  250   15.00194  71.27156  -2.77774 H_     1 0  0.00000
ATOM    2557  CD   LYS A  250   15.10832  73.41682  -2.98573 C_3    4 0  0.00000
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ATOM    2558 HCD   LYS A  250   15.69238  74.24170  -2.56970 H_     1 0  0.00000
ATOM    2559 HCD   LYS A  250   14.05230  73.63082  -2.79922 H_     1 0  0.00000
ATOM    2560  CE   LYS A  250   15.32317  73.34515  -4.51928 C_3    4 0  0.31000
ATOM    2561 HCE   LYS A  250   14.73556  72.52810  -4.94478 H_     1 0  0.00000
ATOM    2562 HCE   LYS A  250   16.37569  73.18095  -4.75506 H_     1 0  0.00000
ATOM    2563  NZ   LYS A  250   14.90715  74.59474  -5.16228 N_3    4 0 -0.30000
ATOM    2564 HNZ   LYS A  250   15.45865  75.36993  -4.79094 H___A  1 0  0.33000
ATOM    2565 HNZ   LYS A  250   15.05968  74.52109  -6.17044 H___A  1 0  0.33000
ATOM    2566 HNZ   LYS A  250   13.91556  74.75879  -4.98080 H___A  1 0  0.33000
ATOM    2567  N    VAL A  251   17.67650  71.16400   0.83527 N_R    3 0 -0.47000
ATOM    2568 HN    VAL A  251   18.26431  71.83771   0.46429 H___A  1 0  0.31000
ATOM    2569  CA   VAL A  251   17.65700  71.04880   2.27532 C_3    4 0  0.16000
ATOM    2570 HCA   VAL A  251   16.91092  70.30648   2.56322 H_     1 0  0.00000
ATOM    2571  C    VAL A  251   17.28322  72.30827   2.98885 C_R    3 0  0.51000
ATOM    2572  O    VAL A  251   17.55292  73.41941   2.47404 O_2    1 2 -0.51000
ATOM    2573  CB   VAL A  251   19.04704  70.51510   2.77010 C_3    4 0  0.00000
ATOM    2574 HCB   VAL A  251   19.00621  70.42847   3.86232 H_     1 0  0.00000
ATOM    2575  CG1  VAL A  251   19.32953  69.08506   2.23183 C_3    4 0  0.00000
ATOM    2576 HCG1  VAL A  251   19.35260  69.07055   1.14208 H_     1 0  0.00000
ATOM    2577 HCG1  VAL A  251   20.29434  68.73520   2.59223 H_     1 0  0.00000
ATOM    2578 HCG1  VAL A  251   18.56083  68.39142   2.57626 H_     1 0  0.00000
ATOM    2579  CG2  VAL A  251   20.24145  71.45624   2.43387 C_3    4 0  0.00000
ATOM    2580 HCG2  VAL A  251   20.10505  72.43206   2.90080 H_     1 0  0.00000
ATOM    2581 HCG2  VAL A  251   21.17654  71.03750   2.80967 H_     1 0  0.00000
ATOM    2582 HCG2  VAL A  251   20.33723  71.59439   1.35622 H_     1 0  0.00000
ATOM    2583  N    ARG A  252   16.71504  72.23621   4.21987 N_R    3 0 -0.47000
ATOM    2584 HN    ARG A  252   16.50444  71.34440   4.51031 H___A  1 0  0.31000
ATOM    2585  CA   ARG A  252   16.47066  73.33168   5.13542 C_3    4 0  0.16000
ATOM    2586 HCA   ARG A  252   16.76694  74.28230   4.67894 H_     1 0  0.00000
ATOM    2587  C    ARG A  252   17.26312  73.11531   6.37696 C_R    3 0  0.51000
ATOM    2588  O    ARG A  252   17.22104  71.98204   6.90885 O_2    1 2 -0.51000
ATOM    2589  CB   ARG A  252   14.96864  73.44891   5.54576 C_3    4 0  0.00000
ATOM    2590 HCB   ARG A  252   14.76051  72.67637   6.27961 H_     1 0  0.00000
ATOM    2591 HCB   ARG A  252   14.33536  73.26321   4.67570 H_     1 0  0.00000
ATOM    2592  CG   ARG A  252   14.54268  74.80602   6.18376 C_3    4 0  0.00000
ATOM    2593 HCG   ARG A  252   14.22685  75.48708   5.38983 H_     1 0  0.00000
ATOM    2594 HCG   ARG A  252   15.40296  75.27602   6.66772 H_     1 0  0.00000
ATOM    2595  CD   ARG A  252   13.42381  74.69452   7.26454 C_3    4 0  0.38000
ATOM    2596 HCD   ARG A  252   13.07827  75.69877   7.51764 H_     1 0  0.00000
ATOM    2597 HCD   ARG A  252   13.86555  74.26706   8.16779 H_     1 0  0.00000
ATOM    2598  NE   ARG A  252   12.28246  73.89361   6.95794 N_R    3 0 -0.70000
ATOM    2599 HNE   ARG A  252   12.01737  73.19439   7.57265 H___A  1 0  0.44000
ATOM    2600  CZ   ARG A  252   11.44881  74.00771   5.92727 C_R    3 0  0.64000
ATOM    2601  NH1  ARG A  252   11.57449  74.81968   4.88658 N_R    3 0 -0.80000
ATOM    2602 HNH1  ARG A  252   11.02569  74.70302   4.10746 H___A  1 0  0.46000
ATOM    2603 HNH1  ARG A  252   12.26636  75.48841   4.89439 H___A  1 0  0.46000
ATOM    2604  NH2  ARG A  252   10.42078  73.19258   6.01652 N_R    3 0 -0.80000
ATOM    2605 HNH2  ARG A  252    9.70652  73.17916   5.37314 H___A  1 0  0.46000
ATOM    2606 HNH2  ARG A  252   10.43090  72.61324   6.78313 H___A  1 0  0.46000
ATOM    2607  N    PHE A  253   17.94116  74.13489   6.95482 N_R    3 0 -0.47000
ATOM    2608 HN    PHE A  253   17.96299  74.97195   6.46736 H___A  1 0  0.31000
ATOM    2609  CA   PHE A  253   18.58991  74.12616   8.24145 C_3    4 0  0.16000
ATOM    2610 HCA   PHE A  253   18.42260  73.17651   8.75788 H_     1 0  0.00000
ATOM    2611  C    PHE A  253   18.00372  75.21439   9.08347 C_R    3 0  0.51000
ATOM    2612  O    PHE A  253   18.09640  76.39515   8.67003 O_2    1 2 -0.51000
ATOM    2613  CB   PHE A  253   20.13087  74.31235   8.05889 C_3    4 0  0.00000
ATOM    2614 HCB   PHE A  253   20.53876  74.76026   8.97043 H_     1 0  0.00000
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ATOM    2615 HCB   PHE A  253   20.33316  75.02566   7.25468 H_     1 0  0.00000
ATOM    2616  CG   PHE A  253   20.85830  73.04208   7.77077 C_R    3 0  0.00000
ATOM    2617  CD1  PHE A  253   21.74002  72.49013   8.73088 C_R    3 0  0.00000
ATOM    2618 HCD1  PHE A  253   21.90731  72.96806   9.61684 H_     1 0  0.00000
ATOM    2619  CD2  PHE A  253   20.69211  72.35764   6.54192 C_R    3 0  0.00000
ATOM    2620 HCD2  PHE A  253   20.08529  72.73948   5.81423 H_     1 0  0.00000
ATOM    2621  CE1  PHE A  253   22.40555  71.27684   8.49057 C_R    3 0  0.00000
ATOM    2622 HCE1  PHE A  253   23.02455  70.88747   9.20262 H_     1 0  0.00000
ATOM    2623  CE2  PHE A  253   21.36261  71.14350   6.29722 C_R    3 0  0.00000
ATOM    2624 HCE2  PHE A  253   21.23117  70.65406   5.41018 H_     1 0  0.00000
ATOM    2625  CZ   PHE A  253   22.21926  70.60490   7.27267 C_R    3 0  0.00000
ATOM    2626 HCZ   PHE A  253   22.71377  69.73084   7.09701 H_     1 0  0.00000
ATOM    2627  N    GLN A  254   17.39284  74.94755  10.26650 N_R    3 0 -0.47000
ATOM    2628 HN    GLN A  254   17.31945  74.02259  10.50254 H___A  1 0  0.31000
ATOM    2629  CA   GLN A  254   16.82093  75.89700  11.19925 C_3    4 0  0.16000
ATOM    2630 HCA   GLN A  254   16.84463  76.88353  10.73986 H_     1 0  0.00000
ATOM    2631  C    GLN A  254   17.61903  75.94369  12.44437 C_2    3 0  0.51000
ATOM    2632  O    GLN A  254   17.68395  74.89113  13.06365 O_2    1 2 -0.51000
ATOM    2633  CB   GLN A  254   15.30353  75.55288  11.46132 C_3    4 0  0.00000
ATOM    2634 HCB   GLN A  254   15.09644  75.51507  12.53496 H_     1 0  0.00000
ATOM    2635 HCB   GLN A  254   15.06567  74.56511  11.05559 H_     1 0  0.00000
ATOM    2636  CG   GLN A  254   14.32765  76.59127  10.83849 C_3    4 0  0.00000
ATOM    2637 HCG   GLN A  254   14.60268  76.72388   9.78818 H_     1 0  0.00000
ATOM    2638 HCG   GLN A  254   14.48198  77.54914  11.34078 H_     1 0  0.00000
ATOM    2639  CD   GLN A  254   12.87492  76.30309  10.89972 C_R    3 0  0.55000
ATOM    2640  OE1  GLN A  254   12.13110  76.72301   9.98713 O_2    1 2 -0.55000
ATOM    2641  NE2  GLN A  254   12.23656  75.64303  11.87541 N_R    3 0 -0.60000
ATOM    2642 HNE2  GLN A  254   11.26881  75.60892  11.84900 H___A  1 0  0.30000
ATOM    2643 HNE2  GLN A  254   12.70447  75.15430  12.56196 H___A  1 0  0.30000
ATOM    2644  N    PRO A  255   18.27080  76.99776  12.94786 N_R    3 0 -0.29000
ATOM    2645  CA   PRO A  255   18.93844  77.01652  14.24356 C_3    4 0  0.11000
ATOM    2646 HCA   PRO A  255   19.83153  76.38930  14.15109 H_     1 0  0.00000
ATOM    2647  C    PRO A  255   18.13904  76.57335  15.39159 C_2    3 0  0.51000
ATOM    2648  O    PRO A  255   17.01435  77.03494  15.52186 O_2    1 2 -0.51000
ATOM    2649  CB   PRO A  255   19.41188  78.48008  14.43432 C_3    4 0  0.00000
ATOM    2650 HCB   PRO A  255   20.37441  78.53277  14.95157 H_     1 0  0.00000
ATOM    2651 HCB   PRO A  255   18.67992  79.08007  14.98581 H_     1 0  0.00000
ATOM    2652  CG   PRO A  255   19.51613  79.01952  13.00504 C_3    4 0  0.00000
ATOM    2653 HCG   PRO A  255   20.49887  78.78248  12.58543 H_     1 0  0.00000
ATOM    2654 HCG   PRO A  255   19.35462  80.09983  12.96135 H_     1 0  0.00000
ATOM    2655  CD   PRO A  255   18.41823  78.24802  12.25920 C_3    4 0  0.18000
ATOM    2656 HCD   PRO A  255   17.47393  78.79945  12.29164 H_     1 0  0.00000
ATOM    2657 HCD   PRO A  255   18.73010  78.11253  11.21972 H_     1 0  0.00000
ATOM    2658  N    VAL A  256   18.61260  75.69228  16.26152 N_R    3 0 -0.47000
ATOM    2659 HN    VAL A  256   19.50515  75.38316  16.11423 H___A  1 0  0.31000
ATOM    2660  CA   VAL A  256   17.90237  75.12444  17.39047 C_3    4 0  0.16000
ATOM    2661 HCA   VAL A  256   17.14731  75.84277  17.72955 H_     1 0  0.00000
ATOM    2662  C    VAL A  256   18.80256  74.91405  18.57201 C_R    3 0  0.51000
ATOM    2663  O    VAL A  256   20.00880  75.24463  18.50087 O_2    1 2 -0.51000
ATOM    2664  CB   VAL A  256   17.17156  73.81541  16.90092 C_3    4 0  0.00000
ATOM    2665 HCB   VAL A  256   16.88597  73.97263  15.85583 H_     1 0  0.00000
ATOM    2666  CG1  VAL A  256   18.08085  72.55457  16.91068 C_3    4 0  0.00000
ATOM    2667 HCG1  VAL A  256   18.36046  72.27733  17.92696 H_     1 0  0.00000
ATOM    2668 HCG1  VAL A  256   17.56830  71.70729  16.45571 H_     1 0  0.00000
ATOM    2669 HCG1  VAL A  256   18.98955  72.74836  16.34766 H_     1 0  0.00000
ATOM    2670  CG2  VAL A  256   15.82945  73.53536  17.63198 C_3    4 0  0.00000
ATOM    2671 HCG2  VAL A  256   15.15613  74.38801  17.52149 H_     1 0  0.00000
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ATOM    2672 HCG2  VAL A  256   15.33765  72.66260  17.19780 H_     1 0  0.00000
ATOM    2673 HCG2  VAL A  256   15.97950  73.34341  18.69305 H_     1 0  0.00000
ATOM    2674  N    TYR A  257   18.33385  74.33350  19.70608 N_R    3 0 -0.47000
ATOM    2675 HN    TYR A  257   17.38804  74.14366  19.74340 H___A  1 0  0.31000
ATOM    2676  CA   TYR A  257   19.10054  73.93601  20.85642 C_3    4 0  0.16000
ATOM    2677 HCA   TYR A  257   20.15836  74.17241  20.70539 H_     1 0  0.00000
ATOM    2678  C    TYR A  257   18.97827  72.46576  21.07495 C_R    3 0  0.51000
ATOM    2679  O    TYR A  257   17.88155  71.97745  21.43578 O_2    1 2 -0.51000
ATOM    2680  CB   TYR A  257   18.60791  74.74685  22.09275 C_3    4 0  0.00000
ATOM    2681 HCB   TYR A  257   17.53128  74.59077  22.20654 H_     1 0  0.00000
ATOM    2682 HCB   TYR A  257   18.74467  75.81177  21.88981 H_     1 0  0.00000
ATOM    2683  CG   TYR A  257   19.31158  74.43777  23.37108 C_R    3 0  0.00000
ATOM    2684  CD1  TYR A  257   20.68893  74.72299  23.51505 C_R    3 0  0.00000
ATOM    2685 HCD1  TYR A  257   21.21476  75.10675  22.72755 H_     1 0  0.00000
ATOM    2686  CD2  TYR A  257   18.62109  73.88242  24.47507 C_R    3 0  0.00000
ATOM    2687 HCD2  TYR A  257   17.62763  73.65044  24.40170 H_     1 0  0.00000
ATOM    2688  CE1  TYR A  257   21.35131  74.49656  24.73652 C_R    3 0  0.00000
ATOM    2689 HCE1  TYR A  257   22.34635  74.71809  24.82119 H_     1 0  0.00000
ATOM    2690  CE2  TYR A  257   19.28291  73.65356  25.69735 C_R    3 0  0.00000
ATOM    2691 HCE2  TYR A  257   18.76767  73.26150  26.48803 H_     1 0  0.00000
ATOM    2692  CZ   TYR A  257   20.64417  73.97979  25.83686 C_R    3 0  0.11000
ATOM    2693  OH   TYR A  257   21.26772  73.81095  27.02500 O_R    2 2 -0.54000
ATOM    2694 HOH   TYR A  257   22.20898  74.05464  27.11454 H___A  1 0  0.43000
ATOM    2695  N    PHE A  258   20.06056  71.66958  20.91710 N_R    3 0 -0.47000
ATOM    2696 HN    PHE A  258   20.84129  72.07943  20.50830 H___A  1 0  0.31000
ATOM    2697  CA   PHE A  258   20.21602  70.31753  21.38250 C_3    4 0  0.16000
ATOM    2698 HCA   PHE A  258   19.36627  70.03031  22.00141 H_     1 0  0.00000
ATOM    2699  C    PHE A  258   21.46187  70.34269  22.21266 C_R    3 0  0.51000
ATOM    2700  O    PHE A  258   22.53936  70.46875  21.58386 O_2    1 2 -0.51000
ATOM    2701  CB   PHE A  258   20.30289  69.29961  20.20611 C_3    4 0  0.00000
ATOM    2702 HCB   PHE A  258   20.80574  68.38745  20.54175 H_     1 0  0.00000
ATOM    2703 HCB   PHE A  258   20.92486  69.72993  19.42042 H_     1 0  0.00000
ATOM    2704  CG   PHE A  258   18.98312  68.90095  19.64811 C_R    3 0  0.00000
ATOM    2705  CD1  PHE A  258   18.10588  68.08836  20.40772 C_R    3 0  0.00000
ATOM    2706 HCD1  PHE A  258   18.36208  67.79330  21.35338 H_     1 0  0.00000
ATOM    2707  CD2  PHE A  258   18.59993  69.27021  18.33617 C_R    3 0  0.00000
ATOM    2708 HCD2  PHE A  258   19.22061  69.83909  17.75599 H_     1 0  0.00000
ATOM    2709  CE1  PHE A  258   16.88064  67.65391  19.86876 C_R    3 0  0.00000
ATOM    2710 HCE1  PHE A  258   16.26053  67.05939  20.42328 H_     1 0  0.00000
ATOM    2711  CE2  PHE A  258   17.37243  68.83851  17.79866 C_R    3 0  0.00000
ATOM    2712 HCE2  PHE A  258   17.10940  69.10315  16.84684 H_     1 0  0.00000
ATOM    2713  CZ   PHE A  258   16.51492  68.02781  18.56345 C_R    3 0  0.00000
ATOM    2714 HCZ   PHE A  258   15.62913  67.70490  18.16834 H_     1 0  0.00000
ATOM    2715  N    PRO A  259   21.50724  70.31026  23.58135 N_R    3 0 -0.29000
ATOM    2716  CA   PRO A  259   22.66693  70.66868  24.36977 C_3    4 0  0.11000
ATOM    2717 HCA   PRO A  259   22.67462  71.76423  24.40740 H_     1 0  0.00000
ATOM    2718  C    PRO A  259   23.99711  70.21449  23.95251 C_2    3 0  0.51000
ATOM    2719  O    PRO A  259   24.94645  70.98630  23.98776 O_2    1 2 -0.51000
ATOM    2720  CB   PRO A  259   22.33383  70.15528  25.78533 C_3    4 0  0.00000
ATOM    2721 HCB   PRO A  259   22.73768  70.83327  26.54026 H_     1 0  0.00000
ATOM    2722 HCB   PRO A  259   22.72699  69.14631  25.94721 H_     1 0  0.00000
ATOM    2723  CG   PRO A  259   20.80451  70.11098  25.85919 C_3    4 0  0.00000
ATOM    2724 HCG   PRO A  259   20.42185  71.01015  26.34702 H_     1 0  0.00000
ATOM    2725 HCG   PRO A  259   20.45899  69.23663  26.41451 H_     1 0  0.00000
ATOM    2726  CD   PRO A  259   20.35344  70.05184  24.39262 C_3    4 0  0.18000
ATOM    2727 HCD   PRO A  259   19.95036  69.06034  24.16703 H_     1 0  0.00000
ATOM    2728 HCD   PRO A  259   19.57965  70.80587  24.22128 H_     1 0  0.00000
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ATOM    2729  N    PHE A  260   24.18223  68.96988  23.55330 N_R    3 0 -0.47000
ATOM    2730 HN    PHE A  260   23.39416  68.41226  23.54477 H___A  1 0  0.31000
ATOM    2731  CA   PHE A  260   25.42204  68.38093  23.11241 C_3    4 0  0.16000
ATOM    2732 HCA   PHE A  260   26.16395  68.60181  23.88683 H_     1 0  0.00000
ATOM    2733  C    PHE A  260   25.98261  68.92682  21.83953 C_R    3 0  0.51000
ATOM    2734  O    PHE A  260   27.15806  68.60652  21.52984 O_2    1 2 -0.51000
ATOM    2735  CB   PHE A  260   25.29187  66.82798  23.08302 C_3    4 0  0.00000
ATOM    2736 HCB   PHE A  260   25.15556  66.48242  24.10687 H_     1 0  0.00000
ATOM    2737 HCB   PHE A  260   26.24193  66.39810  22.75396 H_     1 0  0.00000
ATOM    2738  CG   PHE A  260   24.18069  66.26948  22.26374 C_R    3 0  0.00000
ATOM    2739  CD1  PHE A  260   22.85575  66.22744  22.76509 C_R    3 0  0.00000
ATOM    2740 HCD1  PHE A  260   22.64154  66.58914  23.69599 H_     1 0  0.00000
ATOM    2741  CD2  PHE A  260   24.43558  65.72025  20.98634 C_R    3 0  0.00000
ATOM    2742 HCD2  PHE A  260   25.38100  65.72425  20.59757 H_     1 0  0.00000
ATOM    2743  CE1  PHE A  260   21.81116  65.67441  22.00369 C_R    3 0  0.00000
ATOM    2744 HCE1  PHE A  260   20.85700  65.66128  22.37171 H_     1 0  0.00000
ATOM    2745  CE2  PHE A  260   23.39717  65.14482  20.23547 C_R    3 0  0.00000
ATOM    2746 HCE2  PHE A  260   23.60592  64.73378  19.32613 H_     1 0  0.00000
ATOM    2747  CZ   PHE A  260   22.08473  65.12829  20.74001 C_R    3 0  0.00000
ATOM    2748 HCZ   PHE A  260   21.32919  64.71447  20.19506 H_     1 0  0.00000
ATOM    2749  N    VAL A  261   25.28234  69.76381  21.03421 N_R    3 0 -0.47000
ATOM    2750 HN    VAL A  261   24.37955  69.97532  21.27260 H___A  1 0  0.31000
ATOM    2751  CA   VAL A  261   25.76358  70.38934  19.83130 C_3    4 0  0.16000
ATOM    2752 HCA   VAL A  261   26.84400  70.25067  19.77661 H_     1 0  0.00000
ATOM    2753  C    VAL A  261   25.53499  71.86735  19.84855 C_R    3 0  0.51000
ATOM    2754  O    VAL A  261   24.40536  72.32584  20.12979 O_2    1 2 -0.51000
ATOM    2755  CB   VAL A  261   25.16559  69.72431  18.54746 C_3    4 0  0.00000
ATOM    2756 HCB   VAL A  261   25.42717  70.37377  17.71291 H_     1 0  0.00000
ATOM    2757  CG1  VAL A  261   25.80685  68.34438  18.23409 C_3    4 0  0.00000
ATOM    2758 HCG1  VAL A  261   25.65197  67.65099  19.05819 H_     1 0  0.00000
ATOM    2759 HCG1  VAL A  261   25.36949  67.91569  17.33155 H_     1 0  0.00000
ATOM    2760 HCG1  VAL A  261   26.87647  68.45222  18.06295 H_     1 0  0.00000
ATOM    2761  CG2  VAL A  261   23.62031  69.59340  18.55756 C_3    4 0  0.00000
ATOM    2762 HCG2  VAL A  261   23.15243  70.57031  18.67218 H_     1 0  0.00000
ATOM    2763 HCG2  VAL A  261   23.26709  69.16458  17.62070 H_     1 0  0.00000
ATOM    2764 HCG2  VAL A  261   23.30006  68.94278  19.37177 H_     1 0  0.00000
ATOM    2765  N    GLU A  262   26.54043  72.69611  19.48162 N_R    3 0 -0.47000
ATOM    2766 HN    GLU A  262   27.31351  72.24667  19.15713 H___A  1 0  0.31000
ATOM    2767  CA   GLU A  262   26.54143  74.13179  19.45054 C_3    4 0  0.16000
ATOM    2768 HCA   GLU A  262   25.55433  74.45289  19.13612 H_     1 0  0.00000
ATOM    2769  C    GLU A  262   27.54676  74.61880  18.44934 C_R    3 0  0.51000
ATOM    2770  O    GLU A  262   28.75677  74.40558  18.71774 O_2    1 2 -0.51000
ATOM    2771  CB   GLU A  262   26.83769  74.77587  20.84586 C_3    4 0  0.00000
ATOM    2772 HCB   GLU A  262   27.22623  75.79179  20.71188 H_     1 0  0.00000
ATOM    2773 HCB   GLU A  262   27.62689  74.20030  21.33772 H_     1 0  0.00000
ATOM    2774  CG   GLU A  262   25.62685  74.88810  21.81269 C_3    4 0 -0.10000
ATOM    2775 HCG   GLU A  262   25.99959  75.27169  22.76578 H_     1 0  0.00000
ATOM    2776 HCG   GLU A  262   25.22044  73.89514  22.00582 H_     1 0  0.00000
ATOM    2777  CD   GLU A  262   24.53612  75.78994  21.37260 C_R    3 0  0.62000
ATOM    2778  OE1  GLU A  262   24.55532  76.41417  20.28513 O_2    1 2 -0.76000
ATOM    2779  OE2  GLU A  262   23.55943  75.98742  22.12678 O_2    1 2 -0.76000
ATOM    2780  N    PRO A  263   27.25934  75.30288  17.29415 N_R    3 0 -0.29000
ATOM    2781  CA   PRO A  263   25.95059  75.47235  16.70628 C_3    4 0  0.11000
ATOM    2782 HCA   PRO A  263   25.41778  76.20265  17.32708 H_     1 0  0.00000
ATOM    2783  C    PRO A  263   25.13555  74.26577  16.53541 C_2    3 0  0.51000
ATOM    2784  O    PRO A  263   25.65328  73.26551  16.04818 O_2    1 2 -0.51000
ATOM    2785  CB   PRO A  263   26.22301  76.13560  15.33378 C_3    4 0  0.00000
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ATOM    2786 HCB   PRO A  263   25.41263  76.80649  15.03636 H_     1 0  0.00000
ATOM    2787 HCB   PRO A  263   26.37566  75.39059  14.54627 H_     1 0  0.00000
ATOM    2788  CG   PRO A  263   27.53229  76.89811  15.55470 C_3    4 0  0.00000
ATOM    2789 HCG   PRO A  263   27.32592  77.88136  15.98965 H_     1 0  0.00000
ATOM    2790 HCG   PRO A  263   28.09474  77.02435  14.62508 H_     1 0  0.00000
ATOM    2791  CD   PRO A  263   28.27651  76.01030  16.56447 C_3    4 0  0.18000
ATOM    2792 HCD   PRO A  263   28.92819  75.31365  16.03632 H_     1 0  0.00000
ATOM    2793 HCD   PRO A  263   28.88503  76.63705  17.22337 H_     1 0  0.00000
ATOM    2794  N    GLY A  264   23.86114  74.30518  16.89132 N_R    3 0 -0.47000
ATOM    2795 HN    GLY A  264   23.55873  75.13846  17.28989 H___A  1 0  0.31000
ATOM    2796  CA   GLY A  264   22.86468  73.27666  16.79466 C_3    4 0  0.16000
ATOM    2797 HCA   GLY A  264   22.39823  73.18788  17.77677 H_     1 0  0.00000
ATOM    2798 HCA   GLY A  264   23.31103  72.31090  16.56399 H_     1 0  0.00000
ATOM    2799  C    GLY A  264   21.80320  73.60244  15.80477 C_R    3 0  0.51000
ATOM    2800  O    GLY A  264   21.30082  74.75104  15.79017 O_2    1 2 -0.51000
ATOM    2801  N    ALA A  265   21.37925  72.67523  14.91097 N_R    3 0 -0.47000
ATOM    2802 HN    ALA A  265   21.75199  71.80417  14.99824 H___A  1 0  0.31000
ATOM    2803  CA   ALA A  265   20.45721  72.85447  13.82215 C_3    4 0  0.16000
ATOM    2804 HCA   ALA A  265   19.93949  73.81003  13.93123 H_     1 0  0.00000
ATOM    2805  C    ALA A  265   19.43238  71.77292  13.69672 C_R    3 0  0.51000
ATOM    2806  O    ALA A  265   19.74445  70.56680  13.77747 O_2    1 2 -0.51000
ATOM    2807  CB   ALA A  265   21.26888  72.93039  12.50808 C_3    4 0  0.00000
ATOM    2808 HCB   ALA A  265   21.83032  72.00753  12.34249 H_     1 0  0.00000
ATOM    2809 HCB   ALA A  265   20.59509  73.09155  11.66409 H_     1 0  0.00000
ATOM    2810 HCB   ALA A  265   21.97258  73.76445  12.54721 H_     1 0  0.00000
ATOM    2811  N    GLN A  266   18.16790  72.10454  13.36996 N_R    3 0 -0.47000
ATOM    2812 HN    GLN A  266   18.00458  73.04012  13.30076 H___A  1 0  0.31000
ATOM    2813  CA   GLN A  266   17.05853  71.26111  12.99522 C_3    4 0  0.16000
ATOM    2814 HCA   GLN A  266   17.11873  70.28271  13.48089 H_     1 0  0.00000
ATOM    2815  C    GLN A  266   17.07472  71.12467  11.53537 C_2    3 0  0.51000
ATOM    2816  O    GLN A  266   17.09035  72.16692  10.88763 O_2    1 2 -0.51000
ATOM    2817  CB   GLN A  266   15.79557  72.01563  13.51646 C_3    4 0  0.00000
ATOM    2818 HCB   GLN A  266   15.89043  73.05417  13.18810 H_     1 0  0.00000
ATOM    2819 HCB   GLN A  266   15.83253  72.03422  14.60803 H_     1 0  0.00000
ATOM    2820  CG   GLN A  266   14.38134  71.49967  13.10840 C_3    4 0  0.00000
ATOM    2821 HCG   GLN A  266   13.98525  70.84662  13.88897 H_     1 0  0.00000
ATOM    2822 HCG   GLN A  266   14.43338  70.91837  12.18543 H_     1 0  0.00000
ATOM    2823  CD   GLN A  266   13.45666  72.64160  12.91492 C_R    3 0  0.55000
ATOM    2824  OE1  GLN A  266   13.36978  73.59997  13.71845 O_2    1 2 -0.55000
ATOM    2825  NE2  GLN A  266   12.73236  72.81968  11.81237 N_R    3 0 -0.60000
ATOM    2826 HNE2  GLN A  266   12.34376  73.67660  11.71757 H___A  1 0  0.30000
ATOM    2827 HNE2  GLN A  266   12.64352  72.16006  11.13142 H___A  1 0  0.30000
ATOM    2828  N    PHE A  267   17.09800  69.95556  10.90660 N_R    3 0 -0.47000
ATOM    2829 HN    PHE A  267   16.99822  69.16882  11.44365 H___A  1 0  0.31000
ATOM    2830  CA   PHE A  267   17.27427  69.76225   9.48002 C_3    4 0  0.16000
ATOM    2831 HCA   PHE A  267   17.32985  70.74895   9.02482 H_     1 0  0.00000
ATOM    2832  C    PHE A  267   16.14718  69.06816   8.78202 C_R    3 0  0.51000
ATOM    2833  O    PHE A  267   15.64244  68.02250   9.26979 O_2    1 2 -0.51000
ATOM    2834  CB   PHE A  267   18.66856  69.15709   9.14000 C_3    4 0  0.00000
ATOM    2835 HCB   PHE A  267   19.43385  69.74780   9.65342 H_     1 0  0.00000
ATOM    2836 HCB   PHE A  267   18.86044  69.31326   8.07342 H_     1 0  0.00000
ATOM    2837  CG   PHE A  267   18.88655  67.71783   9.44586 C_R    3 0  0.00000
ATOM    2838  CD1  PHE A  267   18.62107  66.72615   8.47102 C_R    3 0  0.00000
ATOM    2839 HCD1  PHE A  267   18.19511  66.98010   7.57672 H_     1 0  0.00000
ATOM    2840  CD2  PHE A  267   19.43877  67.31564  10.68357 C_R    3 0  0.00000
ATOM    2841 HCD2  PHE A  267   19.61829  68.00587  11.41631 H_     1 0  0.00000
ATOM    2842  CE1  PHE A  267   18.96659  65.38219   8.70159 C_R    3 0  0.00000
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ATOM    2843 HCE1  PHE A  267   18.81136  64.68240   7.97768 H_     1 0  0.00000
ATOM    2844  CE2  PHE A  267   19.75927  65.96512  10.91919 C_R    3 0  0.00000
ATOM    2845 HCE2  PHE A  267   20.14906  65.67641  11.81623 H_     1 0  0.00000
ATOM    2846  CZ   PHE A  267   19.54829  65.00330   9.92079 C_R    3 0  0.00000
ATOM    2847 HCZ   PHE A  267   19.81653  64.03204  10.08367 H_     1 0  0.00000
ATOM    2848  N    ALA A  268   15.72502  69.58181   7.59139 N_R    3 0 -0.47000
ATOM    2849 HN    ALA A  268   16.17756  70.38104   7.31820 H___A  1 0  0.31000
ATOM    2850  CA   ALA A  268   14.70966  69.05137   6.71140 C_3    4 0  0.16000
ATOM    2851 HCA   ALA A  268   14.35895  68.10048   7.11853 H_     1 0  0.00000
ATOM    2852  C    ALA A  268   15.17125  68.80959   5.32225 C_R    3 0  0.51000
ATOM    2853  O    ALA A  268   16.15489  69.44504   4.87182 O_2    1 2 -0.51000
ATOM    2854  CB   ALA A  268   13.50480  70.01814   6.58957 C_3    4 0  0.00000
ATOM    2855 HCB   ALA A  268   13.72416  70.85098   5.93425 H_     1 0  0.00000
ATOM    2856 HCB   ALA A  268   12.63204  69.52198   6.16887 H_     1 0  0.00000
ATOM    2857 HCB   ALA A  268   13.25075  70.40679   7.56226 H_     1 0  0.00000
ATOM    2858  N    VAL A  269   14.41603  67.99360   4.54776 N_R    3 0 -0.47000
ATOM    2859 HN    VAL A  269   13.66404  67.61191   5.00418 H___A  1 0  0.31000
ATOM    2860  CA   VAL A  269   14.62364  67.65122   3.16497 C_3    4 0  0.16000
ATOM    2861 HCA   VAL A  269   15.45641  68.24827   2.78052 H_     1 0  0.00000
ATOM    2862  C    VAL A  269   13.43487  67.96283   2.31243 C_R    3 0  0.51000
ATOM    2863  O    VAL A  269   12.28721  67.64432   2.70010 O_2    1 2 -0.51000
ATOM    2864  CB   VAL A  269   15.06563  66.15154   3.05279 C_3    4 0  0.00000
ATOM    2865 HCB   VAL A  269   15.97364  66.04175   3.65711 H_     1 0  0.00000
ATOM    2866  CG1  VAL A  269   14.03867  65.12469   3.60391 C_3    4 0  0.00000
ATOM    2867 HCG1  VAL A  269   13.11576  65.15400   3.02659 H_     1 0  0.00000
ATOM    2868 HCG1  VAL A  269   14.44325  64.11352   3.54563 H_     1 0  0.00000
ATOM    2869 HCG1  VAL A  269   13.81303  65.33639   4.64724 H_     1 0  0.00000
ATOM    2870  CG2  VAL A  269   15.45248  65.77457   1.59982 C_3    4 0  0.00000
ATOM    2871 HCG2  VAL A  269   16.17589  66.49231   1.22185 H_     1 0  0.00000
ATOM    2872 HCG2  VAL A  269   15.89223  64.77728   1.56594 H_     1 0  0.00000
ATOM    2873 HCG2  VAL A  269   14.58043  65.79092   0.94741 H_     1 0  0.00000
ATOM    2874  N    TRP A  270   13.58025  68.55296   1.09935 N_R    3 0 -0.47000
ATOM    2875 HN    TRP A  270   14.46054  68.83884   0.85882 H___A  1 0  0.31000
ATOM    2876  CA   TRP A  270   12.54768  68.72384   0.10939 C_3    4 0  0.16000
ATOM    2877 HCA   TRP A  270   11.64724  69.09274   0.60547 H_     1 0  0.00000
ATOM    2878  C    TRP A  270   12.24434  67.44815  -0.60299 C_R    3 0  0.51000
ATOM    2879  O    TRP A  270   13.18148  66.81693  -1.14480 O_2    1 2 -0.51000
ATOM    2880  CB   TRP A  270   12.99034  69.81352  -0.91030 C_3    4 0  0.00000
ATOM    2881 HCB   TRP A  270   13.94412  69.51198  -1.34908 H_     1 0  0.00000
ATOM    2882 HCB   TRP A  270   13.15500  70.75697  -0.38840 H_     1 0  0.00000
ATOM    2883  CG   TRP A  270   12.01569  70.05659  -2.00200 C_R    3 0 -0.03000
ATOM    2884  CD1  TRP A  270   12.16200  69.67939  -3.33918 C_R    3 0  0.15000
ATOM    2885 HCD1  TRP A  270   12.97118  69.20357  -3.73528 H_     1 0  0.00000
ATOM    2886  CD2  TRP A  270   10.76909  70.67654  -1.92645 C_R    3 0 -0.02000
ATOM    2887  NE1  TRP A  270   11.06496  70.02750  -4.03128 N_R    3 0 -0.61000
ATOM    2888 HNE1  TRP A  270   10.92228  69.86088  -4.97849 H___A  1 0  0.38000
ATOM    2889  CE2  TRP A  270   10.20262  70.62918  -3.20106 C_R    3 0  0.13000
ATOM    2890  CE3  TRP A  270   10.08511  71.28175  -0.85704 C_R    3 0  0.00000
ATOM    2891 HCE3  TRP A  270   10.49963  71.32080   0.07323 H_     1 0  0.00000
ATOM    2892  CZ2  TRP A  270    8.92840  71.16397  -3.45444 C_R    3 0  0.00000
ATOM    2893 HCZ2  TRP A  270    8.51843  71.11649  -4.38932 H_     1 0  0.00000
ATOM    2894  CZ3  TRP A  270    8.81024  71.83568  -1.09876 C_R    3 0  0.00000
ATOM    2895 HCZ3  TRP A  270    8.29954  72.28271  -0.33468 H_     1 0  0.00000
ATOM    2896  CH2  TRP A  270    8.23269  71.77129  -2.38738 C_R    3 0  0.00000
ATOM    2897 HCH2  TRP A  270    7.30453  72.16807  -2.54827 H_     1 0  0.00000
ATOM    2898  N    TRP A  271   10.96227  67.03300  -0.73276 N_R    3 0 -0.47000
ATOM    2899 HN    TRP A  271   10.29681  67.56029  -0.30326 H___A  1 0  0.31000
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ATOM    2900  CA   TRP A  271   10.47403  65.90118  -1.46608 C_3    4 0  0.16000
ATOM    2901 HCA   TRP A  271   11.31738  65.28667  -1.78096 H_     1 0  0.00000
ATOM    2902  C    TRP A  271    9.70066  66.38716  -2.65883 C_R    3 0  0.51000
ATOM    2903  O    TRP A  271    8.58473  66.93104  -2.42886 O_2    1 2 -0.51000
ATOM    2904  CB   TRP A  271    9.64051  65.00626  -0.50359 C_3    4 0  0.00000
ATOM    2905 HCB   TRP A  271    8.81310  65.58618  -0.08853 H_     1 0  0.00000
ATOM    2906 HCB   TRP A  271   10.28747  64.72637   0.33007 H_     1 0  0.00000
ATOM    2907  CG   TRP A  271    9.13260  63.74118  -1.09016 C_R    3 0 -0.03000
ATOM    2908  CD1  TRP A  271    9.85765  62.83823  -1.87222 C_R    3 0  0.15000
ATOM    2909 HCD1  TRP A  271   10.81915  62.96249  -2.18288 H_     1 0  0.00000
ATOM    2910  CD2  TRP A  271    7.87248  63.15920  -0.93502 C_R    3 0 -0.02000
ATOM    2911  NE1  TRP A  271    9.09926  61.76931  -2.15926 N_R    3 0 -0.61000
ATOM    2912 HNE1  TRP A  271    9.37712  61.00290  -2.68983 H___A  1 0  0.38000
ATOM    2913  CE2  TRP A  271    7.89531  61.93076  -1.59707 C_R    3 0  0.13000
ATOM    2914  CE3  TRP A  271    6.71512  63.57711  -0.25284 C_R    3 0  0.00000
ATOM    2915 HCE3  TRP A  271    6.69404  64.46400   0.24657 H_     1 0  0.00000
ATOM    2916  CZ2  TRP A  271    6.77924  61.07692  -1.60578 C_R    3 0  0.00000
ATOM    2917 HCZ2  TRP A  271    6.81159  60.17897  -2.09251 H_     1 0  0.00000
ATOM    2918  CZ3  TRP A  271    5.58360  62.73276  -0.25476 C_R    3 0  0.00000
ATOM    2919 HCZ3  TRP A  271    4.73701  63.01739   0.24049 H_     1 0  0.00000
ATOM    2920  CH2  TRP A  271    5.61508  61.49083  -0.92668 C_R    3 0  0.00000
ATOM    2921 HCH2  TRP A  271    4.79030  60.88721  -0.91829 H_     1 0  0.00000
ATOM    2922  N    PRO A  272   10.16716  66.30952  -3.95019 N_R    3 0 -0.29000
ATOM    2923  CA   PRO A  272    9.40902  66.66893  -5.12892 C_3    4 0  0.11000
ATOM    2924 HCA   PRO A  272    9.17828  67.73841  -5.04432 H_     1 0  0.00000
ATOM    2925  C    PRO A  272    8.17939  65.91743  -5.37726 C_2    3 0  0.51000
ATOM    2926  O    PRO A  272    7.17066  66.53911  -5.67597 O_2    1 2 -0.51000
ATOM    2927  CB   PRO A  272   10.37955  66.49351  -6.32807 C_3    4 0  0.00000
ATOM    2928 HCB   PRO A  272   10.26952  67.29852  -7.06013 H_     1 0  0.00000
ATOM    2929 HCB   PRO A  272   10.24557  65.53430  -6.83996 H_     1 0  0.00000
ATOM    2930  CG   PRO A  272   11.76619  66.51303  -5.68581 C_3    4 0  0.00000
ATOM    2931 HCG   PRO A  272   12.11914  67.54363  -5.60116 H_     1 0  0.00000
ATOM    2932 HCG   PRO A  272   12.49429  65.92458  -6.25031 H_     1 0  0.00000
ATOM    2933  CD   PRO A  272   11.50689  65.92290  -4.29414 C_3    4 0  0.18000
ATOM    2934 HCD   PRO A  272   11.58076  64.83237  -4.31833 H_     1 0  0.00000
ATOM    2935 HCD   PRO A  272   12.25508  66.32743  -3.60958 H_     1 0  0.00000
ATOM    2936  N    GLU A  273    8.14952  64.59626  -5.32745 N_R    3 0 -0.47000
ATOM    2937 HN    GLU A  273    8.98346  64.15941  -5.10083 H___A  1 0  0.31000
ATOM    2938  CA   GLU A  273    7.04687  63.73411  -5.69806 C_3    4 0  0.16000
ATOM    2939 HCA   GLU A  273    6.96695  63.77418  -6.78910 H_     1 0  0.00000
ATOM    2940  C    GLU A  273    5.73541  64.14420  -5.11376 C_R    3 0  0.51000
ATOM    2941  O    GLU A  273    4.70928  64.19211  -5.83181 O_2    1 2 -0.51000
ATOM    2942  CB   GLU A  273    7.33485  62.25200  -5.30842 C_3    4 0  0.00000
ATOM    2943 HCB   GLU A  273    6.53470  61.61767  -5.70318 H_     1 0  0.00000
ATOM    2944 HCB   GLU A  273    7.29613  62.16742  -4.22533 H_     1 0  0.00000
ATOM    2945  CG   GLU A  273    8.69698  61.66521  -5.77159 C_3    4 0 -0.10000
ATOM    2946 HCG   GLU A  273    8.78393  60.63897  -5.40562 H_     1 0  0.00000
ATOM    2947 HCG   GLU A  273    9.51479  62.23148  -5.31928 H_     1 0  0.00000
ATOM    2948  CD   GLU A  273    8.84593  61.64530  -7.23736 C_R    3 0  0.62000
ATOM    2949  OE1  GLU A  273    8.08107  60.95047  -7.94235 O_2    1 2 -0.76000
ATOM    2950  OE2  GLU A  273    9.72580  62.34047  -7.79069 O_2    1 2 -0.76000
ATOM    2951  N    GLY A  274    5.67688  64.52184  -3.81463 N_R    3 0 -0.47000
ATOM    2952 HN    GLY A  274    6.50331  64.45918  -3.31354 H___A  1 0  0.31000
ATOM    2953  CA   GLY A  274    4.53137  65.05111  -3.13760 C_3    4 0  0.16000
ATOM    2954 HCA   GLY A  274    4.44563  64.51099  -2.19496 H_     1 0  0.00000
ATOM    2955 HCA   GLY A  274    3.60597  64.87788  -3.69218 H_     1 0  0.00000
ATOM    2956  C    GLY A  274    4.63358  66.50339  -2.85075 C_R    3 0  0.51000
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ATOM    2957  O    GLY A  274     3.86195  66.99527  -1.99223 O_2    1 2 -0.51000
ATOM    2958  N    GLY A  275     5.51078  67.30997  -3.49429 N_R    3 0 -0.47000
ATOM    2959 HN    GLY A  275     6.05282  66.93211  -4.18387 H___A  1 0  0.31000
ATOM    2960  CA   GLY A  275     5.64287  68.72678  -3.35787 C_3    4 0  0.16000
ATOM    2961 HCA   GLY A  275     4.81159  69.18329  -3.90193 H_     1 0  0.00000
ATOM    2962 HCA   GLY A  275     6.56065  69.02126  -3.86772 H_     1 0  0.00000
ATOM    2963  C    GLY A  275     5.69881  69.25207  -1.97522 C_R    3 0  0.51000
ATOM    2964  O    GLY A  275     4.81816  70.07542  -1.62604 O_2    1 2 -0.51000
ATOM    2965  N    LYS A  276     6.65365  68.85642  -1.09286 N_R    3 0 -0.47000
ATOM    2966 HN    LYS A  276     7.31448  68.23084  -1.42356 H___A  1 0  0.31000
ATOM    2967  CA   LYS A  276     6.66973  69.30042   0.29052 C_3    4 0  0.16000
ATOM    2968 HCA   LYS A  276     6.45203  70.37383   0.28339 H_     1 0  0.00000
ATOM    2969  C    LYS A  276     7.97364  69.20132   1.00126 C_R    3 0  0.51000
ATOM    2970  O    LYS A  276     8.91643  68.54871   0.51011 O_2    1 2 -0.51000
ATOM    2971  CB   LYS A  276     5.53438  68.60887   1.11454 C_3    4 0  0.00000
ATOM    2972 HCB   LYS A  276     4.57152  68.85892   0.66776 H_     1 0  0.00000
ATOM    2973 HCB   LYS A  276     5.52197  69.02622   2.12546 H_     1 0  0.00000
ATOM    2974  CG   LYS A  276     5.65385  67.06353   1.21205 C_3    4 0  0.00000
ATOM    2975 HCG   LYS A  276     6.62453  66.82781   1.65513 H_     1 0  0.00000
ATOM    2976 HCG   LYS A  276     5.63861  66.63373   0.20870 H_     1 0  0.00000
ATOM    2977  CD   LYS A  276     4.54757  66.39954   2.08507 C_3    4 0  0.00000
ATOM    2978 HCD   LYS A  276     4.27248  67.06371   2.90797 H_     1 0  0.00000
ATOM    2979 HCD   LYS A  276     4.96813  65.49740   2.53683 H_     1 0  0.00000
ATOM    2980  CE   LYS A  276     3.26372  65.96049   1.33522 C_3    4 0  0.31000
ATOM    2981 HCE   LYS A  276     2.55171  65.56137   2.06152 H_     1 0  0.00000
ATOM    2982 HCE   LYS A  276     3.50511  65.16427   0.62856 H_     1 0  0.00000
ATOM    2983  NZ   LYS A  276     2.59524  67.02915   0.58840 N_3    4 0 -0.30000
ATOM    2984 HNZ   LYS A  276     3.08491  67.15041  -0.28106 H___A  1 0  0.33000
ATOM    2985 HNZ   LYS A  276     1.64554  66.73489   0.35962 H___A  1 0  0.33000
ATOM    2986 HNZ   LYS A  276     2.56886  67.89637   1.12624 H___A  1 0  0.33000
ATOM    2987  N    TRP A  277     8.11833  69.81017   2.20304 N_R    3 0 -0.47000
ATOM    2988 HN    TRP A  277     7.35287  70.30686   2.52679 H___A  1 0  0.31000
ATOM    2989  CA   TRP A  277     9.25126  69.74163   3.08545 C_3    4 0  0.16000
ATOM    2990 HCA   TRP A  277    10.16193  69.51051   2.52835 H_     1 0  0.00000
ATOM    2991  C    TRP A  277     9.03392  68.69849   4.12639 C_R    3 0  0.51000
ATOM    2992  O    TRP A  277     7.96342  68.71994   4.78083 O_2    1 2 -0.51000
ATOM    2993  CB   TRP A  277     9.44312  71.10070   3.81986 C_3    4 0  0.00000
ATOM    2994 HCB   TRP A  277    10.08155  70.94707   4.69445 H_     1 0  0.00000
ATOM    2995 HCB   TRP A  277     8.47435  71.44778   4.19215 H_     1 0  0.00000
ATOM    2996  CG   TRP A  277    10.07775  72.18228   3.03741 C_R    3 0 -0.03000
ATOM    2997  CD1  TRP A  277     9.48743  73.38515   2.64191 C_R    3 0  0.15000
ATOM    2998 HCD1  TRP A  277     8.51173  73.64784   2.78902 H_     1 0  0.00000
ATOM    2999  CD2  TRP A  277    11.41063  72.26840   2.63796 C_R    3 0 -0.02000
ATOM    3000  NE1  TRP A  277    10.41274  74.16693   2.05864 N_R    3 0 -0.61000
ATOM    3001 HNE1  TRP A  277    10.25327  75.05460   1.69535 H___A  1 0  0.38000
ATOM    3002  CE2  TRP A  277    11.57889  73.50266   2.01040 C_R    3 0  0.13000
ATOM    3003  CE3  TRP A  277    12.49336  71.38517   2.79607 C_R    3 0  0.00000
ATOM    3004 HCE3  TRP A  277    12.37937  70.49859   3.28854 H_     1 0  0.00000
ATOM    3005  CZ2  TRP A  277    12.82159  73.88349   1.47440 C_R    3 0  0.00000
ATOM    3006 HCZ2  TRP A  277    12.93557  74.78556   1.00834 H_     1 0  0.00000
ATOM    3007  CZ3  TRP A  277    13.74543  71.75392   2.26283 C_R    3 0  0.00000
ATOM    3008 HCZ3  TRP A  277    14.53805  71.11896   2.35780 H_     1 0  0.00000
ATOM    3009  CH2  TRP A  277    13.90842  72.99191   1.60062 C_R    3 0  0.00000
ATOM    3010 HCH2  TRP A  277    14.81999  73.24546   1.21484 H_     1 0  0.00000
ATOM    3011  N    LEU A  278    10.00055  67.79585   4.41176 N_R    3 0 -0.47000
ATOM    3012 HN    LEU A  278    10.77569  67.78998   3.85238 H___A  1 0  0.31000
ATOM    3013  CA   LEU A  278     9.97357  66.82429   5.46796 C_3    4 0  0.16000
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ATOM    3014 HCA   LEU A  278     8.99852  66.81159   5.96174 H_      1 0  0.00000
ATOM    3015  C    LEU A  278    11.00179  67.16701   6.48461 C_R     3 0  0.51000
ATOM    3016  O    LEU A  278    12.21246  67.04149   6.17928 O_2     1 2 -0.51000
ATOM    3017  CB   LEU A  278    10.22752  65.39303   4.90064 C_3     4 0  0.00000
ATOM    3018 HCB   LEU A  278    10.03989  64.66392   5.69663 H_      1 0  0.00000
ATOM    3019 HCB   LEU A  278    11.28207  65.30471   4.63266 H_      1 0  0.00000
ATOM    3020  CG   LEU A  278     9.40291  64.99961   3.63767 C_3     4 0  0.00000
ATOM    3021 HCG   LEU A  278     9.57553  65.74545   2.85544 H_      1 0  0.00000
ATOM    3022  CD1  LEU A  278     9.91295  63.64636   3.07408 C_3     4 0  0.00000
ATOM    3023 HCD1  LEU A  278     9.84686  62.86602   3.83292 H_      1 0  0.00000
ATOM    3024 HCD1  LEU A  278     9.32332  63.35378   2.20659 H_      1 0  0.00000
ATOM    3025 HCD1  LEU A  278    10.95373  63.73016   2.75817 H_      1 0  0.00000
ATOM    3026  CD2  LEU A  278     7.87908  64.96030   3.92249 C_3     4 0  0.00000
ATOM    3027 HCD2  LEU A  278     7.51511  65.94671   4.20958 H_      1 0  0.00000
ATOM    3028 HCD2  LEU A  278     7.33748  64.65535   3.02794 H_      1 0  0.00000
ATOM    3029 HCD2  LEU A  278     7.65514  64.26068   4.72892 H_      1 0  0.00000
ATOM    3030  N    GLU A  279    10.64377  67.58920   7.72215 N_R     3 0 -0.47000
ATOM    3031 HN    GLU A  279     9.69956  67.72575   7.88615 H___A   1 0  0.31000
ATOM    3032  CA   GLU A  279    11.53307  67.75889   8.84472 C_3     4 0  0.16000
ATOM    3033 HCA   GLU A  279    12.36617  68.39476   8.55164 H_      1 0  0.00000
ATOM    3034  C    GLU A  279    12.06901  66.42777   9.23635 C_R     3 0  0.51000
ATOM    3035  O    GLU A  279    11.24118  65.52611   9.51454 O_2     1 2 -0.51000
ATOM    3036  CB   GLU A  279    10.80719  68.45767  10.03339 C_3     4 0  0.00000
ATOM    3037 HCB   GLU A  279    11.50861  68.54681  10.86895 H_      1 0  0.00000
ATOM    3038 HCB   GLU A  279     9.98295  67.82337  10.37131 H_      1 0  0.00000
ATOM    3039  CG   GLU A  279    10.22445  69.86909   9.72861 C_3     4 0 -0.10000
ATOM    3040 HCG   GLU A  279     9.77459  70.25541  10.64562 H_      1 0  0.00000
ATOM    3041 HCG   GLU A  279     9.42601  69.77841   8.98783 H_      1 0  0.00000
ATOM    3042  CD   GLU A  279    11.20965  70.86818   9.26995 C_R     3 0  0.62000
ATOM    3043  OE1  GLU A  279    12.35854  70.92706   9.75493 O_2     1 2 -0.76000
ATOM    3044  OE2  GLU A  279    10.94620  71.70129   8.37300 O_2     1 2 -0.76000
ATOM    3045  N    LEU A  280    13.39819  66.15764   9.20232 N_R     3 0 -0.47000
ATOM    3046 HN    LEU A  280    14.03136  66.87710   9.15763 H___A   1 0  0.31000
ATOM    3047  CA   LEU A  280    13.96698  64.83881   9.18450 C_3     4 0  0.16000
ATOM    3048 HCA   LEU A  280    13.16858  64.09699   9.13807 H_      1 0  0.00000
ATOM    3049  C    LEU A  280    14.74956  64.57862  10.41744 C_R     3 0  0.51000
ATOM    3050  O    LEU A  280    14.60652  63.46933  10.98870 O_2     1 2 -0.51000
ATOM    3051  CB   LEU A  280    14.83186  64.68075   7.89223 C_3     4 0  0.00000
ATOM    3052 HCB   LEU A  280    15.78676  65.19474   8.04770 H_      1 0  0.00000
ATOM    3053 HCB   LEU A  280    14.33676  65.19728   7.06402 H_      1 0  0.00000
ATOM    3054  CG   LEU A  280    15.09614  63.20325   7.44540 C_3     4 0  0.00000
ATOM    3055 HCG   LEU A  280    15.40413  62.62840   8.32224 H_      1 0  0.00000
ATOM    3056  CD1  LEU A  280    13.82921  62.52159   6.85204 C_3     4 0  0.00000
ATOM    3057 HCD1  LEU A  280    13.45942  63.07323   5.98647 H_      1 0  0.00000
ATOM    3058 HCD1  LEU A  280    14.06769  61.50822   6.53693 H_      1 0  0.00000
ATOM    3059 HCD1  LEU A  280    13.02892  62.45257   7.58710 H_      1 0  0.00000
ATOM    3060  CD2  LEU A  280    16.25639  63.11615   6.41640 C_3     4 0  0.00000
ATOM    3061 HCD2  LEU A  280    17.17708  63.49498   6.85268 H_      1 0  0.00000
ATOM    3062 HCD2  LEU A  280    16.43246  62.07995   6.12245 H_      1 0  0.00000
ATOM    3063 HCD2  LEU A  280    16.02980  63.70023   5.52385 H_      1 0  0.00000
ATOM    3064  N    GLY A  281    15.60530  65.50818  10.91439 N_R     3 0 -0.47000
ATOM    3065 HN    GLY A  281    15.67381  66.34643  10.44330 H___A   1 0  0.31000
ATOM    3066  CA   GLY A  281    16.43621  65.24725  12.05755 C_3     4 0  0.16000
ATOM    3067 HCA   GLY A  281    17.25524  64.61579  11.71423 H_      1 0  0.00000
ATOM    3068 HCA   GLY A  281    15.87290  64.68590  12.80805 H_      1 0  0.00000
ATOM    3069  C    GLY A  281    17.01700  66.40647  12.76554 C_R     3 0  0.51000
ATOM    3070  O    GLY A  281    16.69715  67.58237  12.47334 O_2     1 2 -0.51000
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ATOM    3071  N    GLY A  282   17.92317  66.13667  13.73108 N_R    3 0 -0.47000
ATOM    3072 HN    GLY A  282   18.16751  65.21047  13.82043 H___A  1 0  0.31000
ATOM    3073  CA   GLY A  282   18.58329  67.07098  14.59211 C_3    4 0  0.16000
ATOM    3074 HCA   GLY A  282   18.29596  66.82722  15.61483 H_     1 0  0.00000
ATOM    3075 HCA   GLY A  282   18.27810  68.10111  14.39818 H_     1 0  0.00000
ATOM    3076  C    GLY A  282   20.05082  66.93724  14.47172 C_R    3 0  0.51000
ATOM    3077  O    GLY A  282   20.54708  65.79304  14.55366 O_2    1 2 -0.51000
ATOM    3078  N    ALA A  283   20.85816  67.99780  14.23722 N_R    3 0 -0.47000
ATOM    3079 HN    ALA A  283   20.44881  68.84983  14.12530 H___A  1 0  0.31000
ATOM    3080  CA   ALA A  283   22.28447  67.94796  14.06482 C_3    4 0  0.16000
ATOM    3081 HCA   ALA A  283   22.68026  67.05386  14.54336 H_     1 0  0.00000
ATOM    3082  C    ALA A  283   23.02823  69.08692  14.65293 C_R    3 0  0.51000
ATOM    3083  O    ALA A  283   22.42069  70.06290  15.13767 O_2    1 2 -0.51000
ATOM    3084  CB   ALA A  283   22.56753  67.91707  12.54137 C_3    4 0  0.00000
ATOM    3085 HCB   ALA A  283   22.18933  68.82143  12.05891 H_     1 0  0.00000
ATOM    3086 HCB   ALA A  283   23.63624  67.83465  12.34517 H_     1 0  0.00000
ATOM    3087 HCB   ALA A  283   22.08281  67.05998  12.08767 H_     1 0  0.00000
ATOM    3088  N    GLY A  284   24.37950  69.07330  14.61587 N_R    3 0 -0.47000
ATOM    3089 HN    GLY A  284   24.75935  68.22151  14.40631 H___A  1 0  0.31000
ATOM    3090  CA   GLY A  284   25.22328  70.21276  14.79783 C_3    4 0  0.16000
ATOM    3091 HCA   GLY A  284   24.80333  70.83951  15.57736 H_     1 0  0.00000
ATOM    3092 HCA   GLY A  284   25.21723  70.79125  13.87194 H_     1 0  0.00000
ATOM    3093  C    GLY A  284   26.63389  69.92655  15.14291 C_R    3 0  0.51000
ATOM    3094  O    GLY A  284   27.10934  68.77674  14.98972 O_2    1 2 -0.51000
ATOM    3095  N    MET A  285   27.39108  70.94449  15.61955 N_R    3 0 -0.47000
ATOM    3096 HN    MET A  285   26.90864  71.76095  15.78379 H___A  1 0  0.31000
ATOM    3097  CA   MET A  285   28.80318  70.88745  15.91542 C_3    4 0  0.16000
ATOM    3098 HCA   MET A  285   29.27255  70.15526  15.25843 H_     1 0  0.00000
ATOM    3099  C    MET A  285   29.06159  70.47685  17.31932 C_R    3 0  0.51000
ATOM    3100  O    MET A  285   28.56951  71.15455  18.24562 O_2    1 2 -0.51000
ATOM    3101  CB   MET A  285   29.48301  72.25489  15.62526 C_3    4 0  0.00000
ATOM    3102 HCB   MET A  285   30.55257  72.17780  15.83797 H_     1 0  0.00000
ATOM    3103 HCB   MET A  285   29.07777  72.99482  16.31643 H_     1 0  0.00000
ATOM    3104  CG   MET A  285   29.29773  72.79947  14.18400 C_3    4 0  0.04000
ATOM    3105 HCG   MET A  285   29.90182  73.70069  14.05887 H_     1 0  0.00000
ATOM    3106 HCG   MET A  285   28.25359  73.08896  14.05351 H_     1 0  0.00000
ATOM    3107  SD   MET A  285   29.70268  71.63251  12.85573 S_3    2 0 -0.09000
ATOM    3108  CE   MET A  285   31.48648  71.51653  13.08889 C_3    4 0  0.05000
ATOM    3109 HCE   MET A  285   31.71207  71.09090  14.06334 H_     1 0  0.00000
ATOM    3110 HCE   MET A  285   31.89499  70.86359  12.31881 H_     1 0  0.00000
ATOM    3111 HCE   MET A  285   31.94188  72.50295  13.00521 H_     1 0  0.00000
ATOM    3112  N    VAL A  286   29.85016  69.41905  17.61492 N_R    3 0 -0.47000
ATOM    3113 HN    VAL A  286   30.36996  69.07999  16.88538 H___A  1 0  0.31000
ATOM    3114  CA   VAL A  286   29.97667  68.79701  18.91589 C_3    4 0  0.16000
ATOM    3115 HCA   VAL A  286   28.98476  68.43343  19.20136 H_     1 0  0.00000
ATOM    3116  C    VAL A  286   30.42020  69.77049  19.96098 C_R    3 0  0.51000
ATOM    3117  O    VAL A  286   31.52398  70.35151  19.82366 O_2    1 2 -0.51000
ATOM    3118  CB   VAL A  286   30.90639  67.53964  18.81022 C_3    4 0  0.00000
ATOM    3119 HCB   VAL A  286   31.85832  67.86825  18.38570 H_     1 0  0.00000
ATOM    3120  CG1  VAL A  286   31.21115  66.87787  20.18689 C_3    4 0  0.00000
ATOM    3121 HCG1  VAL A  286   30.28490  66.57167  20.67528 H_     1 0  0.00000
ATOM    3122 HCG1  VAL A  286   31.84592  66.00018  20.05999 H_     1 0  0.00000
ATOM    3123 HCG1  VAL A  286   31.74070  67.57186  20.83993 H_     1 0  0.00000
ATOM    3124  CG2  VAL A  286   30.31923  66.46424  17.84986 C_3    4 0  0.00000
ATOM    3125 HCG2  VAL A  286   30.16284  66.87192  16.85176 H_     1 0  0.00000
ATOM    3126 HCG2  VAL A  286   31.00631  65.62259  17.75930 H_     1 0  0.00000
ATOM    3127 HCG2  VAL A  286   29.36255  66.09669  18.22487 H_     1 0  0.00000
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ATOM    3128  N    HSD A  287   29.63905  70.04062  21.03867 N_R    3 0 -0.47000
ATOM    3129 HN    HSD A  287   28.82395  69.54607  21.14362 H___A  1 0  0.31000
ATOM    3130  CA   HSD A  287   29.92169  71.03582  22.03675 C_3    4 0  0.16000
ATOM    3131 HCA   HSD A  287   30.01054  71.98270  21.50103 H_     1 0  0.00000
ATOM    3132  C    HSD A  287   31.18402  70.74004  22.80663 C_R    3 0  0.51000
ATOM    3133  O    HSD A  287   31.23921  69.61976  23.36692 O_2    1 2 -0.51000
ATOM    3134  CB   HSD A  287   28.67951  71.19275  22.96897 C_3    4 0  0.10000
ATOM    3135 HCB   HSD A  287   28.42218  70.23414  23.42564 H_     1 0  0.00000
ATOM    3136 HCB   HSD A  287   27.81881  71.51760  22.37773 H_     1 0  0.00000
ATOM    3137  CG   HSD A  287   28.91481  72.18496  24.03533 C_R    3 0  0.22000
ATOM    3138  ND1  HSD A  287   28.65629  73.50174  23.98412 N_R    2 1 -0.70000
ATOM    3139  CD2  HSD A  287   29.55738  71.93246  25.23921 C_R    3 0  0.04000
ATOM    3140 HCD2  HSD A  287   29.86741  71.02093  25.56758 H_     1 0  0.00000
ATOM    3141  CE1  HSD A  287   29.14233  74.05059  25.10558 C_R    3 0  0.38000
ATOM    3142 HCE1  HSD A  287   29.08985  75.04027  25.34880 H_     1 0  0.00000
ATOM    3143  NE2  HSD A  287   29.73168  73.10673  25.85029 N_R    3 0 -0.36000
ATOM    3144 HNE2  HSD A  287   30.20720  73.26809  26.66350 H___A  1 0  0.32000
ATOM    3145  N    PRO A  288   32.23148  71.60903  22.99526 N_R    3 0 -0.29000
ATOM    3146  CA   PRO A  288   33.45625  71.31903  23.71742 C_3    4 0  0.11000
ATOM    3147 HCA   PRO A  288   34.13219  70.85843  22.98909 H_     1 0  0.00000
ATOM    3148  C    PRO A  288   33.42141  70.47308  24.91236 C_2    3 0  0.51000
ATOM    3149  O    PRO A  288   34.22395  69.55087  25.01306 O_2    1 2 -0.51000
ATOM    3150  CB   PRO A  288   34.02840  72.71420  24.05100 C_3    4 0  0.00000
ATOM    3151 HCB   PRO A  288   35.11653  72.69486  24.16122 H_     1 0  0.00000
ATOM    3152 HCB   PRO A  288   33.58067  73.12383  24.96289 H_     1 0  0.00000
ATOM    3153  CG   PRO A  288   33.60020  73.56074  22.84752 C_3    4 0  0.00000
ATOM    3154 HCG   PRO A  288   34.33534  73.46606  22.04200 H_     1 0  0.00000
ATOM    3155 HCG   PRO A  288   33.49092  74.61594  23.11232 H_     1 0  0.00000
ATOM    3156  CD   PRO A  288   32.26128  72.92818  22.42862 C_3    4 0  0.18000
ATOM    3157 HCD   PRO A  288   31.43474  73.52520  22.82263 H_     1 0  0.00000
ATOM    3158 HCD   PRO A  288   32.19852  72.89215  21.33740 H_     1 0  0.00000
ATOM    3159  N    LYS A  289   32.54041  70.66609  25.88228 N_R    3 0 -0.47000
ATOM    3160 HN    LYS A  289   31.91467  71.39300  25.77583 H___A  1 0  0.31000
ATOM    3161  CA   LYS A  289   32.46055  69.86472  27.08119 C_3    4 0  0.16000
ATOM    3162 HCA   LYS A  289   33.44177  69.94936  27.54030 H_     1 0  0.00000
ATOM    3163  C    LYS A  289   32.21103  68.41074  26.83466 C_R    3 0  0.51000
ATOM    3164  O    LYS A  289   32.53746  67.59827  27.73066 O_2    1 2 -0.51000
ATOM    3165  CB   LYS A  289   31.46456  70.43417  28.13369 C_3    4 0  0.00000
ATOM    3166 HCB   LYS A  289   31.50065  69.80308  29.02754 H_     1 0  0.00000
ATOM    3167 HCB   LYS A  289   30.45148  70.37651  27.73307 H_     1 0  0.00000
ATOM    3168  CG   LYS A  289   31.77790  71.89453  28.57208 C_3    4 0  0.00000
ATOM    3169 HCG   LYS A  289   31.62424  72.56914  27.73358 H_     1 0  0.00000
ATOM    3170 HCG   LYS A  289   32.83629  71.95915  28.83542 H_     1 0  0.00000
ATOM    3171  CD   LYS A  289   30.97132  72.40473  29.79955 C_3    4 0  0.00000
ATOM    3172 HCD   LYS A  289   31.22015  73.45611  29.96374 H_     1 0  0.00000
ATOM    3173 HCD   LYS A  289   31.31434  71.85117  30.67791 H_     1 0  0.00000
ATOM    3174  CE   LYS A  289   29.42913  72.26926  29.73168 C_3    4 0  0.31000
ATOM    3175 HCE   LYS A  289   29.01295  72.53645  30.70618 H_     1 0  0.00000
ATOM    3176 HCE   LYS A  289   29.14650  71.23442  29.53273 H_     1 0  0.00000
ATOM    3177  NZ   LYS A  289   28.77982  73.13416  28.73918 N_3    4 0 -0.30000
ATOM    3178 HNZ   LYS A  289   29.18414  73.05154  27.82633 H___A  1 0  0.33000
ATOM    3179 HNZ   LYS A  289   27.83044  72.80666  28.62768 H___A  1 0  0.33000
ATOM    3180 HNZ   LYS A  289   28.79474  74.11138  29.03742 H___A  1 0  0.33000
ATOM    3181  N    VAL A  290   31.72323  67.94374  25.65883 N_R    3 0 -0.47000
ATOM    3182 HN    VAL A  290   31.53280  68.56808  24.96144 H___A  1 0  0.31000
ATOM    3183  CA   VAL A  290   31.58611  66.55799  25.29255 C_3    4 0  0.16000
ATOM    3184 HCA   VAL A  290   31.13700  66.01059  26.13025 H_     1 0  0.00000
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ATOM    3185  C    VAL A  290   32.94426  66.01552  25.00775 C_R    3 0  0.51000
ATOM    3186  O    VAL A  290   33.34412  64.99026  25.60465 O_2    1 2 -0.51000
ATOM    3187  CB   VAL A  290   30.63894  66.40014  24.05598 C_3    4 0  0.00000
ATOM    3188 HCB   VAL A  290   31.08165  66.94128  23.21594 H_     1 0  0.00000
ATOM    3189  CG1  VAL A  290   30.49067  64.91460  23.61428 C_3    4 0  0.00000
ATOM    3190 HCG1  VAL A  290   30.12340  64.30800  24.44124 H_     1 0  0.00000
ATOM    3191 HCG1  VAL A  290   29.79828  64.82769  22.77591 H_     1 0  0.00000
ATOM    3192 HCG1  VAL A  290   31.45092  64.50992  23.29300 H_     1 0  0.00000
ATOM    3193  CG2  VAL A  290   29.23743  67.02387  24.30975 C_3    4 0  0.00000
ATOM    3194 HCG2  VAL A  290   29.31752  68.08659  24.53793 H_     1 0  0.00000
ATOM    3195 HCG2  VAL A  290   28.61223  66.92112  23.42320 H_     1 0  0.00000
ATOM    3196 HCG2  VAL A  290   28.74414  66.53303  25.14627 H_     1 0  0.00000
ATOM    3197  N    PHE A  291   33.76906  66.66429  24.14893 N_R    3 0 -0.47000
ATOM    3198 HN    PHE A  291   33.41056  67.44232  23.69979 H___A  1 0  0.31000
ATOM    3199  CA   PHE A  291   35.14257  66.31669  23.91635 C_3    4 0  0.16000
ATOM    3200 HCA   PHE A  291   35.16014  65.30730  23.49761 H_     1 0  0.00000
ATOM    3201  C    PHE A  291   35.92188  66.30769  25.19171 C_R    3 0  0.51000
ATOM    3202  O    PHE A  291   36.66838  65.33359  25.44995 O_2    1 2 -0.51000
ATOM    3203  CB   PHE A  291   35.81456  67.28056  22.89618 C_3    4 0  0.00000
ATOM    3204 HCB   PHE A  291   36.86954  67.01765  22.84014 H_     1 0  0.00000
ATOM    3205 HCB   PHE A  291   35.77461  68.29540  23.29927 H_     1 0  0.00000
ATOM    3206  CG   PHE A  291   35.30945  67.25832  21.49118 C_R    3 0  0.00000
ATOM    3207  CD1  PHE A  291   35.24037  66.05271  20.74970 C_R    3 0  0.00000
ATOM    3208 HCD1  PHE A  291   35.46311  65.15848  21.18856 H_     1 0  0.00000
ATOM    3209  CD2  PHE A  291   34.97505  68.46562  20.82951 C_R    3 0  0.00000
ATOM    3210 HCD2  PHE A  291   35.01022  69.35593  21.32681 H_     1 0  0.00000
ATOM    3211  CE1  PHE A  291   34.89109  66.05844  19.38651 C_R    3 0  0.00000
ATOM    3212 HCE1  PHE A  291   34.86000  65.18343  18.85968 H_     1 0  0.00000
ATOM    3213  CE2  PHE A  291   34.62275  68.47357  19.46717 C_R    3 0  0.00000
ATOM    3214 HCE2  PHE A  291   34.39605  69.35540  19.00166 H_     1 0  0.00000
ATOM    3215  CZ   PHE A  291   34.59307  67.26997  18.74321 C_R    3 0  0.00000
ATOM    3216 HCZ   PHE A  291   34.34933  67.27393  17.75132 H_     1 0  0.00000
ATOM    3217  N    GLN A  292   35.77389  67.30796  26.09792 N_R    3 0 -0.47000
ATOM    3218 HN    GLN A  292   35.24120  68.05503  25.81461 H___A  1 0  0.31000
ATOM    3219  CA   GLN A  292   36.36266  67.30099  27.41692 C_3    4 0  0.16000
ATOM    3220 HCA   GLN A  292   37.44815  67.26704  27.26731 H_     1 0  0.00000
ATOM    3221  C    GLN A  292   35.95062  66.12965  28.20407 C_2    3 0  0.51000
ATOM    3222  O    GLN A  292   36.83220  65.44760  28.70182 O_2    1 2 -0.51000
ATOM    3223  CB   GLN A  292   36.09150  68.60743  28.21402 C_3    4 0  0.00000
ATOM    3224 HCB   GLN A  292   36.58449  68.53528  29.18936 H_     1 0  0.00000
ATOM    3225 HCB   GLN A  292   35.02370  68.68167  28.40708 H_     1 0  0.00000
ATOM    3226  CG   GLN A  292   36.61239  69.89758  27.51609 C_3    4 0  0.00000
ATOM    3227 HCG   GLN A  292   36.31746  69.89805  26.46703 H_     1 0  0.00000
ATOM    3228 HCG   GLN A  292   37.70461  69.90724  27.54296 H_     1 0  0.00000
ATOM    3229  CD   GLN A  292   36.11400  71.13503  28.15130 C_R    3 0  0.55000
ATOM    3230  OE1  GLN A  292   35.36989  71.93479  27.54288 O_2    1 2 -0.55000
ATOM    3231  NE2  GLN A  292   36.43550  71.46459  29.40742 N_R    3 0 -0.60000
ATOM    3232 HNE2  GLN A  292   36.08882  72.28709  29.78110 H___A  1 0  0.30000
ATOM    3233 HNE2  GLN A  292   37.01012  70.88904  29.93196 H___A  1 0  0.30000
ATOM    3234  N    ALA A  293   34.68490  65.77396  28.38089 N_R    3 0 -0.47000
ATOM    3235 HN    ALA A  293   34.00326  66.37836  28.08546 H___A  1 0  0.31000
ATOM    3236  CA   ALA A  293   34.22457  64.56212  29.02695 C_3    4 0  0.16000
ATOM    3237 HCA   ALA A  293   34.48988  64.64865  30.08584 H_     1 0  0.00000
ATOM    3238  C    ALA A  293   34.82732  63.30880  28.47973 C_R    3 0  0.51000
ATOM    3239  O    ALA A  293   35.35645  62.49302  29.27227 O_2    1 2 -0.51000
ATOM    3240  CB   ALA A  293   32.67939  64.47917  28.97452 C_3    4 0  0.00000
ATOM    3241 HCB   ALA A  293   32.32414  64.45289  27.94515 H_     1 0  0.00000
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ATOM   3242 HCB  ALA A 293   32.33026  63.57930  29.48490 H_     1 0  0.00000
ATOM   3243 HCB  ALA A 293   32.23940  65.34494  29.47320 H_     1 0  0.00000
ATOM   3244  N   VAL A 294   34.85890  63.07324  27.14555 N_R    3 0 -0.47000
ATOM   3245 HN   VAL A 294   34.38009  63.69798  26.60212 H___A  1 0  0.31000
ATOM   3246  CA  VAL A 294   35.55580  61.98933  26.48631 C_3    4 0  0.16000
ATOM   3247 HCA  VAL A 294   35.05397  61.05392  26.75882 H_     1 0  0.00000
ATOM   3248  C   VAL A 294   36.97747  61.91415  26.94069 C_R    3 0  0.51000
ATOM   3249  O   VAL A 294   37.41740  60.86921  27.47904 O_2    1 2 -0.51000
ATOM   3250  CB  VAL A 294   35.46036  62.16479  24.92798 C_3    4 0  0.00000
ATOM   3251 HCB  VAL A 294   35.67636  63.20552  24.69403 H_     1 0  0.00000
ATOM   3252  CG1 VAL A 294   36.48845  61.33198  24.11022 C_3    4 0  0.00000
ATOM   3253 HCG1 VAL A 294   36.31311  60.26464  24.23322 H_     1 0  0.00000
ATOM   3254 HCG1 VAL A 294   36.40717  61.59637  23.06132 H_     1 0  0.00000
ATOM   3255 HCG1 VAL A 294   37.51205  61.55455  24.40591 H_     1 0  0.00000
ATOM   3256  CG2 VAL A 294   34.03342  61.88358  24.38700 C_3    4 0  0.00000
ATOM   3257 HCG2 VAL A 294   33.28907  62.47811  24.91515 H_     1 0  0.00000
ATOM   3258 HCG2 VAL A 294   33.97339  62.13581  23.32842 H_     1 0  0.00000
ATOM   3259 HCG2 VAL A 294   33.78811  60.82940  24.50507 H_     1 0  0.00000
ATOM   3260  N   ASP A 295   37.78798  62.98186  26.76266 N_R    3 0 -0.47000
ATOM   3261 HN   ASP A 295   37.40771  63.75025  26.33155 H___A  1 0  0.31000
ATOM   3262  CA  ASP A 295   39.16656  63.05817  27.15415 C_3    4 0  0.16000
ATOM   3263 HCA  ASP A 295   39.70528  62.28870  26.59565 H_     1 0  0.00000
ATOM   3264  C   ASP A 295   39.36699  62.77631  28.61168 C_R    3 0  0.51000
ATOM   3265  O   ASP A 295   40.23166  61.94275  28.97381 O_2    1 2 -0.51000
ATOM   3266  CB  ASP A 295   39.71436  64.46348  26.75393 C_3    4 0 -0.10000
ATOM   3267 HCB  ASP A 295   40.30008  64.84509  27.58403 H_     1 0  0.00000
ATOM   3268 HCB  ASP A 295   38.90444  65.18258  26.63609 H_     1 0  0.00000
ATOM   3269  CG  ASP A 295   40.54960  64.53566  25.53137 C_R    3 0  0.62000
ATOM   3270  OD1 ASP A 295   40.73595  63.59718  24.72445 O_2    1 2 -0.76000
ATOM   3271  OD2 ASP A 295   41.17973  65.58834  25.28803 O_2    1 2 -0.76000
ATOM   3272  N   ALA A 296   38.60171  63.39316  29.54305 N_R    3 0 -0.47000
ATOM   3273 HN   ALA A 296   38.00030  64.06182  29.23113 H___A  1 0  0.31000
ATOM   3274  CA  ALA A 296   38.60737  63.14232  30.95590 C_3    4 0  0.16000
ATOM   3275 HCA  ALA A 296   39.57414  63.46909  31.34581 H_     1 0  0.00000
ATOM   3276  C   ALA A 296   38.39724  61.70287  31.27072 C_R    3 0  0.51000
ATOM   3277  O   ALA A 296   39.23036  61.10898  31.99330 O_2    1 2 -0.51000
ATOM   3278  CB  ALA A 296   37.54419  64.01881  31.65957 C_3    4 0  0.00000
ATOM   3279 HCB  ALA A 296   36.54524  63.79466  31.28809 H_     1 0  0.00000
ATOM   3280 HCB  ALA A 296   37.56150  63.84400  32.73728 H_     1 0  0.00000
ATOM   3281 HCB  ALA A 296   37.75354  65.07531  31.48183 H_     1 0  0.00000
ATOM   3282  N   TYR A 297   37.34663  61.02015  30.75595 N_R    3 0 -0.47000
ATOM   3283 HN   TYR A 297   36.71124  61.51495  30.23655 H___A  1 0  0.31000
ATOM   3284  CA  TYR A 297   37.11112  59.61170  30.92419 C_3    4 0  0.16000
ATOM   3285 HCA  TYR A 297   37.01044  59.44593  32.00173 H_     1 0  0.00000
ATOM   3286  C   TYR A 297   38.23968  58.77727  30.40666 C_R    3 0  0.51000
ATOM   3287  O   TYR A 297   38.68763  57.87074  31.14677 O_2    1 2 -0.51000
ATOM   3288  CB  TYR A 297   35.74856  59.24162  30.27860 C_3    4 0  0.00000
ATOM   3289 HCB  TYR A 297   35.82785  59.35941  29.19461 H_     1 0  0.00000
ATOM   3290 HCB  TYR A 297   34.98650  59.95359  30.60768 H_     1 0  0.00000
ATOM   3291  CG  TYR A 297   35.25909  57.87912  30.62756 C_R    3 0  0.00000
ATOM   3292  CD1 TYR A 297   34.76557  57.58353  31.92017 C_R    3 0  0.00000
ATOM   3293 HCD1 TYR A 297   34.80170  58.29472  32.65482 H_     1 0  0.00000
ATOM   3294  CD2 TYR A 297   35.24612  56.85613  29.65735 C_R    3 0  0.00000
ATOM   3295 HCD2 TYR A 297   35.64583  57.03039  28.73760 H_     1 0  0.00000
ATOM   3296  CE1 TYR A 297   34.19459  56.32553  32.20454 C_R    3 0  0.00000
ATOM   3297 HCE1 TYR A 297   33.82035  56.13617  33.13698 H_     1 0  0.00000
ATOM   3298  CE2 TYR A 297   34.67874  55.60030  29.93860 C_R    3 0  0.00000
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ATOM   3299 HCE2 TYR A 297   34.66487  54.87733  29.21978 H_     1 0  0.00000
ATOM   3300  CZ  TYR A 297   34.11425  55.34409  31.19969 C_R    3 0  0.11000
ATOM   3301  OH  TYR A 297   33.49222  54.16455  31.42246 O_R    2 2 -0.54000
ATOM   3302 HOH  TYR A 297   33.08507  53.95157  32.28272 H___A  1 0  0.43000
ATOM   3303  N   ARG A 298   38.82922  59.01808  29.20591 N_R    3 0 -0.47000
ATOM   3304 HN   ARG A 298   38.40095  59.66106  28.63784 H___A  1 0  0.31000
ATOM   3305  CA  ARG A 298   40.03370  58.37310  28.72966 C_3    4 0  0.16000
ATOM   3306 HCA  ARG A 298   39.79426  57.31499  28.57895 H_     1 0  0.00000
ATOM   3307  C   ARG A 298   41.16798  58.46936  29.69786 C_R    3 0  0.51000
ATOM   3308  O   ARG A 298   41.69189  57.41200  30.12901 O_2    1 2 -0.51000
ATOM   3309  CB  ARG A 298   40.50737  58.95164  27.36186 C_3    4 0  0.00000
ATOM   3310 HCB  ARG A 298   41.52888  58.62902  27.15599 H_     1 0  0.00000
ATOM   3311 HCB  ARG A 298   40.52644  60.03784  27.41641 H_     1 0  0.00000
ATOM   3312  CG  ARG A 298   39.65495  58.52642  26.14394 C_3    4 0  0.00000
ATOM   3313 HCG  ARG A 298   38.60830  58.76805  26.33977 H_     1 0  0.00000
ATOM   3314 HCG  ARG A 298   39.72954  57.44502  26.00382 H_     1 0  0.00000
ATOM   3315  CD  ARG A 298   40.09091  59.24041  24.84176 C_3    4 0  0.38000
ATOM   3316 HCD  ARG A 298   40.07262  60.32168  24.99220 H_     1 0  0.00000
ATOM   3317 HCD  ARG A 298   39.35050  59.02745  24.06779 H_     1 0  0.00000
ATOM   3318  NE  ARG A 298   41.40710  58.89054  24.39745 N_R    3 0 -0.70000
ATOM   3319 HNE  ARG A 298   42.18518  59.25672  24.82418 H___A  1 0  0.44000
ATOM   3320  CZ  ARG A 298   41.69366  58.15674  23.32593 C_R    3 0  0.64000
ATOM   3321  NH1 ARG A 298   40.85132  57.38969  22.66432 N_R    3 0 -0.80000
ATOM   3322 HNH1 ARG A 298   41.07484  57.05048  21.81005 H___A  1 0  0.46000
ATOM   3323 HNH1 ARG A 298   40.03279  57.09453  23.05214 H___A  1 0  0.46000
ATOM   3324  NH2 ARG A 298   42.94786  58.20854  22.92676 N_R    3 0 -0.80000
ATOM   3325 HNH2 ARG A 298   43.24943  57.74053  22.13784 H___A  1 0  0.46000
ATOM   3326 HNH2 ARG A 298   43.53196  58.70713  23.49376 H___A  1 0  0.46000
ATOM   3327  N   GLU A 299   41.65476  59.66937  30.10796 N_R    3 0 -0.47000
ATOM   3328 HN   GLU A 299   41.21864  60.45341  29.76474 H___A  1 0  0.31000
ATOM   3329  CA  GLU A 299   42.77460  59.81411  31.00865 C_3    4 0  0.16000
ATOM   3330 HCA  GLU A 299   43.56527  59.18674  30.57905 H_     1 0  0.00000
ATOM   3331  C   GLU A 299   42.48895  59.24202  32.35820 C_R    3 0  0.51000
ATOM   3332  O   GLU A 299   43.36993  58.53643  32.90683 O_2    1 2 -0.51000
ATOM   3333  CB  GLU A 299   43.41532  61.23687  30.99884 C_3    4 0  0.00000
ATOM   3334 HCB  GLU A 299   43.70602  61.43894  29.96288 H_     1 0  0.00000
ATOM   3335 HCB  GLU A 299   44.33706  61.21503  31.58802 H_     1 0  0.00000
ATOM   3336  CG  GLU A 299   42.54312  62.41446  31.51241 C_3    4 0 -0.10000
ATOM   3337 HCG  GLU A 299   42.47830  62.37382  32.60233 H_     1 0  0.00000
ATOM   3338 HCG  GLU A 299   41.54135  62.29772  31.11793 H_     1 0  0.00000
ATOM   3339  CD  GLU A 299   43.04078  63.74424  31.08430 C_R    3 0  0.62000
ATOM   3340  OE1 GLU A 299   43.22690  64.00933  29.87875 O_2    1 2 -0.76000
ATOM   3341  OE2 GLU A 299   43.27149  64.68463  31.87613 O_2    1 2 -0.76000
ATOM   3342  N   ARG A 300   41.26487  59.32207  32.94004 N_R    3 0 -0.47000
ATOM   3343 HN   ARG A 300   40.61376  59.90055  32.54471 H___A  1 0  0.31000
ATOM   3344  CA  ARG A 300   40.84940  58.59946  34.11835 C_3    4 0  0.16000
ATOM   3345 HCA  ARG A 300   41.54708  58.89175  34.91010 H_     1 0  0.00000
ATOM   3346  C   ARG A 300   40.92228  57.10810  33.98952 C_R    3 0  0.51000
ATOM   3347  O   ARG A 300   40.83822  56.42965  35.04084 O_2    1 2 -0.51000
ATOM   3348  CB  ARG A 300   39.42792  59.08861  34.54888 C_3    4 0  0.00000
ATOM   3349 HCB  ARG A 300   38.69266  58.77686  33.80362 H_     1 0  0.00000
ATOM   3350 HCB  ARG A 300   39.44024  60.18214  34.56636 H_     1 0  0.00000
ATOM   3351  CG  ARG A 300   38.96009  58.59881  35.95151 C_3    4 0  0.00000
ATOM   3352 HCG  ARG A 300   39.78229  58.73379  36.65980 H_     1 0  0.00000
ATOM   3353 HCG  ARG A 300   38.72751  57.53305  35.90993 H_     1 0  0.00000
ATOM   3354  CD  ARG A 300   37.72466  59.34085  36.52238 C_3    4 0  0.38000
ATOM   3355 HCD  ARG A 300   37.89667  60.41831  36.47788 H_     1 0  0.00000
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ATOM   3356 HCD  ARG A 300   37.61450  59.08596  37.58089 H_     1 0  0.00000
ATOM   3357  NE  ARG A 300   36.50313  59.06312  35.83623 N_R    3 0 -0.70000
ATOM   3358 HNE  ARG A 300   36.21398  59.70407  35.17403 H___A  1 0  0.44000
ATOM   3359  CZ  ARG A 300   35.71867  57.99739  36.02680 C_R    3 0  0.64000
ATOM   3360  NH1 ARG A 300   36.01765  56.97993  36.82248 N_R    3 0 -0.80000
ATOM   3361 HNH1 ARG A 300   35.40049  56.24129  36.91579 H___A  1 0  0.46000
ATOM   3362 HNH1 ARG A 300   36.85910  56.96800  37.29544 H___A  1 0  0.46000
ATOM   3363  NH2 ARG A 300   34.55826  57.94524  35.39560 N_R    3 0 -0.80000
ATOM   3364 HNH2 ARG A 300   33.97576  57.18240  35.51639 H___A  1 0  0.46000
ATOM   3365 HNH2 ARG A 300   34.28853  58.66648  34.81253 H___A  1 0  0.46000
ATOM   3366  N   LEU A 301   41.13413  56.47004  32.81122 N_R    3 0 -0.47000
ATOM   3367 HN   LEU A 301   41.20574  56.97434  31.99911 H___A  1 0  0.31000
ATOM   3368  CA  LEU A 301   41.35218  55.06104  32.62344 C_3    4 0  0.16000
ATOM   3369 HCA  LEU A 301   41.28979  54.51238  33.56324 H_     1 0  0.00000
ATOM   3370  C   LEU A 301   42.72963  54.81151  32.10888 C_R    3 0  0.51000
ATOM   3371  O   LEU A 301   43.04937  53.63673  31.80697 O_2    1 2 -0.51000
ATOM   3372  CB  LEU A 301   40.26797  54.50485  31.64435 C_3    4 0  0.00000
ATOM   3373 HCB  LEU A 301   40.52063  53.47631  31.36648 H_     1 0  0.00000
ATOM   3374 HCB  LEU A 301   40.30844  55.10473  30.73048 H_     1 0  0.00000
ATOM   3375  CG  LEU A 301   38.79600  54.50171  32.16764 C_3    4 0  0.00000
ATOM   3376 HCG  LEU A 301   38.54017  55.51193  32.49871 H_     1 0  0.00000
ATOM   3377  CD1 LEU A 301   37.81894  54.12939  31.01570 C_3    4 0  0.00000
ATOM   3378 HCD1 LEU A 301   38.05197  53.14098  30.61462 H_     1 0  0.00000
ATOM   3379 HCD1 LEU A 301   36.79160  54.11979  31.37807 H_     1 0  0.00000
ATOM   3380 HCD1 LEU A 301   37.88675  54.85868  30.20664 H_     1 0  0.00000
ATOM   3381  CD2 LEU A 301   38.57950  53.54280  33.37150 C_3    4 0  0.00000
ATOM   3382 HCD2 LEU A 301   39.18025  53.84922  34.22733 H_     1 0  0.00000
ATOM   3383 HCD2 LEU A 301   37.53478  53.55729  33.68582 H_     1 0  0.00000
ATOM   3384 HCD2 LEU A 301   38.84817  52.51936  33.10245 H_     1 0  0.00000
ATOM   3385  N   GLY A 302   43.66662  55.78867  31.99283 N_R    3 0 -0.47000
ATOM   3386 HN   GLY A 302   43.46336  56.67896  32.28433 H___A  1 0  0.31000
ATOM   3387  CA  GLY A 302   44.98183  55.59151  31.46618 C_3    4 0  0.16000
ATOM   3388 HCA  GLY A 302   45.39907  54.65992  31.85947 H_     1 0  0.00000
ATOM   3389 HCA  GLY A 302   45.60867  56.40252  31.84183 H_     1 0  0.00000
ATOM   3390  C   GLY A 302   45.08509  55.58761  29.98773 C_R    3 0  0.51000
ATOM   3391  O   GLY A 302   46.18419  55.22762  29.50082 O_2    1 2 -0.51000
ATOM   3392  N   LEU A 303   44.09132  56.02007  29.16839 N_R    3 0 -0.47000
ATOM   3393 HN   LEU A 303   43.29446  56.38937  29.56010 H___A  1 0  0.31000
ATOM   3394  CA  LEU A 303   44.19243  56.10997  27.73374 C_3    4 0  0.16000
ATOM   3395 HCA  LEU A 303   44.95546  55.42180  27.37810 H_     1 0  0.00000
ATOM   3396  C   LEU A 303   44.61207  57.50311  27.39627 C_R    3 0  0.51000
ATOM   3397  O   LEU A 303   43.98913  58.43403  27.96406 O_2    1 2 -0.51000
ATOM   3398  CB  LEU A 303   42.86635  55.74068  26.99434 C_3    4 0  0.00000
ATOM   3399 HCB  LEU A 303   42.94474  56.08997  25.95887 H_     1 0  0.00000
ATOM   3400 HCB  LEU A 303   42.04539  56.29903  27.44738 H_     1 0  0.00000
ATOM   3401  CG  LEU A 303   42.45151  54.23443  26.92710 C_3    4 0  0.00000
ATOM   3402 HCG  LEU A 303   41.58289  54.19155  26.26029 H_     1 0  0.00000
ATOM   3403  CD1 LEU A 303   43.52094  53.30720  26.28489 C_3    4 0  0.00000
ATOM   3404 HCD1 LEU A 303   44.41364  53.24111  26.90658 H_     1 0  0.00000
ATOM   3405 HCD1 LEU A 303   43.12246  52.29869  26.16378 H_     1 0  0.00000
ATOM   3406 HCD1 LEU A 303   43.80204  53.68054  25.29867 H_     1 0  0.00000
ATOM   3407  CD2 LEU A 303   41.96409  53.67945  28.28866 C_3    4 0  0.00000
ATOM   3408 HCD2 LEU A 303   41.11079  54.26118  28.63723 H_     1 0  0.00000
ATOM   3409 HCD2 LEU A 303   41.64513  52.64181  28.18904 H_     1 0  0.00000
ATOM   3410 HCD2 LEU A 303   42.75538  53.72113  29.03438 H_     1 0  0.00000
ATOM   3411  N   PRO A 304   45.61212  57.83934  26.52324 N_R    3 0 -0.29000
ATOM   3412  CA  PRO A 304   46.06025  59.19939  26.34717 C_3    4 0  0.11000
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ATOM   3413 HCA  PRO A 304   46.40122  59.54567  27.32762 H_     1 0  0.00000
ATOM   3414  C   PRO A 304   45.03689  60.11439  25.81789 C_2    3 0  0.51000
ATOM   3415  O   PRO A 304   44.19268  59.63367  25.06453 O_2    1 2 -0.51000
ATOM   3416  CB  PRO A 304   47.28899  59.10337  25.40925 C_3    4 0  0.00000
ATOM   3417 HCB  PRO A 304   48.21010  59.08400  25.99956 H_     1 0  0.00000
ATOM   3418 HCB  PRO A 304   47.35654  59.92637  24.69121 H_     1 0  0.00000
ATOM   3419  CG  PRO A 304   47.10849  57.75823  24.69660 C_3    4 0  0.00000
ATOM   3420 HCG  PRO A 304   48.06789  57.30926  24.42642 H_     1 0  0.00000
ATOM   3421 HCG  PRO A 304   46.50457  57.89161  23.79369 H_     1 0  0.00000
ATOM   3422  CD  PRO A 304   46.34524  56.90682  25.72389 C_3    4 0  0.18000
ATOM   3423 HCD  PRO A 304   45.68693  56.20449  25.20434 H_     1 0  0.00000
ATOM   3424 HCD  PRO A 304   47.04878  56.35449  26.35418 H_     1 0  0.00000
ATOM   3425  N   PRO A 305   44.99003  61.42050  26.07649 N_R    3 0 -0.29000
ATOM   3426  CA  PRO A 305   44.00372  62.29871  25.48869 C_3    4 0  0.11000
ATOM   3427 HCA  PRO A 305   43.00236  61.88150  25.65237 H_     1 0  0.00000
ATOM   3428  C   PRO A 305   44.19051  62.52854  24.05949 C_2    3 0  0.51000
ATOM   3429  O   PRO A 305   45.24419  62.21353  23.52003 O_2    1 2 -0.51000
ATOM   3430  CB  PRO A 305   44.13710  63.59401  26.30700 C_3    4 0  0.00000
ATOM   3431 HCB  PRO A 305   43.48553  63.51295  27.17917 H_     1 0  0.00000
ATOM   3432 HCB  PRO A 305   43.88601  64.49628  25.74185 H_     1 0  0.00000
ATOM   3433  CG  PRO A 305   45.59614  63.60577  26.77038 C_3    4 0  0.00000
ATOM   3434 HCG  PRO A 305   45.72515  64.16635  27.69997 H_     1 0  0.00000
ATOM   3435 HCG  PRO A 305   46.23542  64.03590  25.99341 H_     1 0  0.00000
ATOM   3436  CD  PRO A 305   45.89837  62.11137  26.94882 C_3    4 0  0.18000
ATOM   3437 HCD  PRO A 305   46.94285  61.91263  26.69343 H_     1 0  0.00000
ATOM   3438 HCD  PRO A 305   45.71221  61.81549  27.98566 H_     1 0  0.00000
ATOM   3439  N   ALA A 306   43.20299  63.04639  23.34934 N_R    3 0 -0.47000
ATOM   3440 HN   ALA A 306   42.39920  63.26888  23.82308 H___A  1 0  0.31000
ATOM   3441  CA  ALA A 306   43.20594  63.19336  21.91985 C_3    4 0  0.16000
ATOM   3442 HCA  ALA A 306   44.21904  63.43574  21.57747 H_     1 0  0.00000
ATOM   3443  C   ALA A 306   42.30580  64.27065  21.43523 C_R    3 0  0.51000
ATOM   3444  O   ALA A 306   42.68056  64.97571  20.46404 O_2    1 2 -0.51000
ATOM   3445  CB  ALA A 306   42.80444  61.84331  21.27420 C_3    4 0  0.00000
ATOM   3446 HCB  ALA A 306   41.81339  61.53541  21.60699 H_     1 0  0.00000
ATOM   3447 HCB  ALA A 306   42.80317  61.92935  20.18825 H_     1 0  0.00000
ATOM   3448 HCB  ALA A 306   43.51622  61.06332  21.54988 H_     1 0  0.00000
ATOM   3449  N   TYR A 307   41.10277  64.51446  22.01115 N_R    3 0 -0.47000
ATOM   3450 HN   TYR A 307   40.94775  64.15258  22.88685 H___A  1 0  0.31000
ATOM   3451  CA  TYR A 307   40.06521  65.33930  21.44371 C_3    4 0  0.16000
ATOM   3452 HCA  TYR A 307   40.16594  65.34427  20.35446 H_     1 0  0.00000
ATOM   3453  C   TYR A 307   40.24691  66.75386  21.88498 C_R    3 0  0.51000
ATOM   3454  O   TYR A 307   39.30961  67.44937  22.33781 O_2    1 2 -0.51000
ATOM   3455  CB  TYR A 307   38.67503  64.70540  21.75532 C_3    4 0  0.00000
ATOM   3456 HCB  TYR A 307   37.90248  65.36327  21.35873 H_     1 0  0.00000
ATOM   3457 HCB  TYR A 307   38.52228  64.64549  22.83728 H_     1 0  0.00000
ATOM   3458  CG  TYR A 307   38.52987  63.35583  21.13641 C_R    3 0  0.00000
ATOM   3459  CD1 TYR A 307   38.00119  63.20983  19.83147 C_R    3 0  0.00000
ATOM   3460 HCD1 TYR A 307   37.63062  64.02258  19.32998 H_     1 0  0.00000
ATOM   3461  CD2 TYR A 307   38.97952  62.19806  21.81431 C_R    3 0  0.00000
ATOM   3462 HCD2 TYR A 307   39.33855  62.26500  22.76953 H_     1 0  0.00000
ATOM   3463  CE1 TYR A 307   38.00174  61.95353  19.19412 C_R    3 0  0.00000
ATOM   3464 HCE1 TYR A 307   37.64273  61.87076  18.24176 H_     1 0  0.00000
ATOM   3465  CE2 TYR A 307   38.97218  60.94175  21.17884 C_R    3 0  0.00000
ATOM   3466 HCE2 TYR A 307   39.32409  60.12010  21.67334 H_     1 0  0.00000
ATOM   3467  CZ  TYR A 307   38.52104  60.82420  19.85295 C_R    3 0  0.11000
ATOM   3468  OH  TYR A 307   38.62551  59.64106  19.20616 O_R    2 2 -0.54000
ATOM   3469 HOH  TYR A 307   38.33616  59.55577  18.27850 H___A  1 0  0.43000
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ATOM   3470  N   ARG A 308   41.49082  67.27361  21.77459 N_R   3 0 -0.47000
ATOM   3471 HN   ARG A 308   42.09279  66.67087  21.33370 H___A 1 0  0.31000
ATOM   3472  CA  ARG A 308   41.98337  68.49711  22.35154 C_3   4 0  0.16000
ATOM   3473 HCA  ARG A 308   41.14823  69.05410  22.78654 H_    1 0  0.00000
ATOM   3474  C   ARG A 308   42.55992  69.37509  21.29360 C_R   3 0  0.51000
ATOM   3475  O   ARG A 308   43.79261  69.59235  21.23125 O_2   1 2 -0.51000
ATOM   3476  CB  ARG A 308   42.95426  68.11611  23.52362 C_3   4 0  0.00000
ATOM   3477 HCB  ARG A 308   43.97511  67.98434  23.15693 H_    1 0  0.00000
ATOM   3478 HCB  ARG A 308   42.65507  67.14612  23.91958 H_    1 0  0.00000
ATOM   3479  CG  ARG A 308   42.95711  69.12853  24.70954 C_3   4 0  0.00000
ATOM   3480 HCG  ARG A 308   41.92621  69.36279  24.98996 H_    1 0  0.00000
ATOM   3481 HCG  ARG A 308   43.42831  70.05682  24.37537 H_    1 0  0.00000
ATOM   3482  CD  ARG A 308   43.68692  68.62550  25.98462 C_3   4 0  0.38000
ATOM   3483 HCD  ARG A 308   43.68479  69.42235  26.73399 H_    1 0  0.00000
ATOM   3484 HCD  ARG A 308   44.72380  68.37754  25.74372 H_    1 0  0.00000
ATOM   3485  NE  ARG A 308   43.04259  67.47608  26.51609 N_R   3 0 -0.70000
ATOM   3486 HNE  ARG A 308   42.41571  66.98727  25.97124 H___A 1 0  0.44000
ATOM   3487  CZ  ARG A 308   43.24709  66.88227  27.68770 C_R   3 0  0.64000
ATOM   3488  NH1 ARG A 308   44.02354  67.18832  28.71153 N_R   3 0 -0.80000
ATOM   3489 HNH1 ARG A 308   44.01834  66.56835  29.46280 H___A 1 0  0.46000
ATOM   3490 HNH1 ARG A 308   44.56784  67.97987  28.71476 H___A 1 0  0.46000
ATOM   3491  NH2 ARG A 308   42.56781  65.77594  27.78635 N_R   3 0 -0.80000
ATOM   3492 HNH2 ARG A 308   42.69542  65.18223  28.52588 H___A 1 0  0.46000
ATOM   3493 HNH2 ARG A 308   42.02502  65.55609  27.03574 H___A 1 0  0.46000
ATOM   3494  N   GLY A 309   41.72508  69.95996  20.40056 N_R   3 0 -0.47000
ATOM   3495 HN   GLY A 309   40.77820  69.78896  20.52651 H___A 1 0  0.31000
ATOM   3496  CA  GLY A 309   42.09883  70.82631  19.31398 C_3   4 0  0.16000
ATOM   3497 HCA  GLY A 309   43.18226  70.88317  19.18541 H_    1 0  0.00000
ATOM   3498 HCA  GLY A 309   41.74505  71.82412  19.58228 H_    1 0  0.00000
ATOM   3499  C   GLY A 309   41.49862  70.46394  18.00650 C_R   3 0  0.51000
ATOM   3500  O   GLY A 309   41.57084  71.28927  17.06601 O_2   1 2 -0.51000
ATOM   3501  N   VAL A 310   40.86014  69.28423  17.82171 N_R   3 0 -0.47000
ATOM   3502 HN   VAL A 310   40.86922  68.66804  18.56709 H___A 1 0  0.31000
ATOM   3503  CA  VAL A 310   40.09948  68.90174  16.65400 C_3   4 0  0.16000
ATOM   3504 HCA  VAL A 310   40.61380  69.27005  15.76020 H_    1 0  0.00000
ATOM   3505  C   VAL A 310   38.73301  69.50661  16.66098 C_R   3 0  0.51000
ATOM   3506  O   VAL A 310   38.36249  70.18382  17.64854 O_2   1 2 -0.51000
ATOM   3507  CB  VAL A 310   40.02973  67.33794  16.54994 C_3   4 0  0.00000
ATOM   3508 HCB  VAL A 310   39.52666  67.08708  15.61056 H_    1 0  0.00000
ATOM   3509  CG1 VAL A 310   41.44439  66.69935  16.46069 C_3   4 0  0.00000
ATOM   3510 HCG1 VAL A 310   42.01976  66.89159  17.36767 H_    1 0  0.00000
ATOM   3511 HCG1 VAL A 310   41.36376  65.62169  16.32723 H_    1 0  0.00000
ATOM   3512 HCG1 VAL A 310   41.99009  67.10320  15.60639 H_    1 0  0.00000
ATOM   3513  CG2 VAL A 310   39.19473  66.68267  17.68816 C_3   4 0  0.00000
ATOM   3514 HCG2 VAL A 310   38.16103  67.03096  17.65897 H_    1 0  0.00000
ATOM   3515 HCG2 VAL A 310   39.18039  65.59775  17.57893 H_    1 0  0.00000
ATOM   3516 HCG2 VAL A 310   39.61371  66.93345  18.66127 H_    1 0  0.00000
ATOM   3517  N   THR A 311   37.86625  69.32154  15.63343 N_R   3 0 -0.47000
ATOM   3518 HN   THR A 311   38.17170  68.87906  14.83884 H___A 1 0  0.31000
ATOM   3519  CA  THR A 311   36.46807  69.70236  15.63386 C_3   4 0  0.16000
ATOM   3520 HCA  THR A 311   36.12345  69.85036  16.66166 H_    1 0  0.00000
ATOM   3521  C   THR A 311   35.63598  68.59325  15.07103 C_R   3 0  0.51000
ATOM   3522  O   THR A 311   36.18739  67.62071  14.50110 O_2   1 2 -0.51000
ATOM   3523  CB  THR A 311   36.30535  71.05494  14.86106 C_3   4 0  0.23000
ATOM   3524 HCB  THR A 311   36.54753  70.89232  13.80665 H_    1 0  0.00000
ATOM   3525  OG1 THR A 311   37.21694  72.04689  15.34645 O_3   2 2 -0.66000
ATOM   3526 HOG1 THR A 311   38.05794  71.56779  15.48081 H___A 1 0  0.43000
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ATOM   3527  CG2 THR A 311   34.90022  71.69598  14.96656 C_3    4 0  0.00000
ATOM   3528 HCG2 THR A 311   34.61359  71.81687  16.01246 H_     1 0  0.00000
ATOM   3529 HCG2 THR A 311   34.89724  72.67664  14.48812 H_     1 0  0.00000
ATOM   3530 HCG2 THR A 311   34.16176  71.07834  14.46435 H_     1 0  0.00000
ATOM   3531  N   GLY A 312   34.28350  68.57983  15.17252 N_R    3 0 -0.47000
ATOM   3532 HN   GLY A 312   33.85588  69.30091  15.66020 H___A  1 0  0.31000
ATOM   3533  CA  GLY A 312   33.44828  67.54863  14.62500 C_3    4 0  0.16000
ATOM   3534 HCA  GLY A 312   33.58691  66.63662  15.20710 H_     1 0  0.00000
ATOM   3535 HCA  GLY A 312   33.77434  67.35920  13.59932 H_     1 0  0.00000
ATOM   3536  C   GLY A 312   32.00015  67.84655  14.58000 C_R    3 0  0.51000
ATOM   3537  O   GLY A 312   31.51129  68.72081  15.33369 O_2    1 2 -0.51000
ATOM   3538  N   PHE A 313   31.22747  67.12420  13.73206 N_R    3 0 -0.47000
ATOM   3539 HN   PHE A 313   31.68559  66.39785  13.31169 H___A  1 0  0.31000
ATOM   3540  CA  PHE A 313   29.81857  67.27941  13.48430 C_3    4 0  0.16000
ATOM   3541 HCA  PHE A 313   29.44166  67.99377  14.21728 H_     1 0  0.00000
ATOM   3542  C   PHE A 313   29.08174  66.01166  13.71207 C_R    3 0  0.51000
ATOM   3543  O   PHE A 313   29.55905  64.93203  13.28592 O_2    1 2 -0.51000
ATOM   3544  CB  PHE A 313   29.49230  67.92572  12.10038 C_3    4 0  0.00000
ATOM   3545 HCB  PHE A 313   30.12433  68.81132  12.00891 H_     1 0  0.00000
ATOM   3546 HCB  PHE A 313   28.46535  68.30018  12.13439 H_     1 0  0.00000
ATOM   3547  CG  PHE A 313   29.60881  67.10215  10.85904 C_R    3 0  0.00000
ATOM   3548  CD1 PHE A 313   28.67801  66.07560  10.56293 C_R    3 0  0.00000
ATOM   3549 HCD1 PHE A 313   27.93341  65.84517  11.22255 H_     1 0  0.00000
ATOM   3550  CD2 PHE A 313   30.59815  67.39393   9.89121 C_R    3 0  0.00000
ATOM   3551 HCD2 PHE A 313   31.25927  68.15144  10.04865 H_     1 0  0.00000
ATOM   3552  CE1 PHE A 313   28.73724  65.37139   9.34575 C_R    3 0  0.00000
ATOM   3553 HCE1 PHE A 313   28.05924  64.63945   9.14200 H_     1 0  0.00000
ATOM   3554  CE2 PHE A 313   30.67665  66.66985   8.68823 C_R    3 0  0.00000
ATOM   3555 HCE2 PHE A 313   31.42004  66.86474   8.01991 H_     1 0  0.00000
ATOM   3556  CZ  PHE A 313   29.73095  65.67440   8.40293 C_R    3 0  0.00000
ATOM   3557 HCZ  PHE A 313   29.77135  65.16695   7.51662 H_     1 0  0.00000
ATOM   3558  N   ALA A 314   27.87924  66.07030  14.32579 N_R    3 0 -0.47000
ATOM   3559 HN   ALA A 314   27.59231  66.94744  14.58346 H___A  1 0  0.31000
ATOM   3560  CA  ALA A 314   26.98745  64.98358  14.61550 C_3    4 0  0.16000
ATOM   3561 HCA  ALA A 314   27.38195  64.04039  14.23746 H_     1 0  0.00000
ATOM   3562  C   ALA A 314   25.64624  65.22563  14.01986 C_R    3 0  0.51000
ATOM   3563  O   ALA A 314   25.14778  66.36522  14.15583 O_2    1 2 -0.51000
ATOM   3564  CB  ALA A 314   26.85953  64.84856  16.15106 C_3    4 0  0.00000
ATOM   3565 HCB  ALA A 314   26.46692  65.76508  16.59364 H_     1 0  0.00000
ATOM   3566 HCB  ALA A 314   26.18905  64.02426  16.39888 H_     1 0  0.00000
ATOM   3567 HCB  ALA A 314   27.83479  64.64551  16.59288 H_     1 0  0.00000
ATOM   3568  N   PHE A 315   24.96798  64.25921  13.35346 N_R    3 0 -0.47000
ATOM   3569 HN   PHE A 315   25.47113  63.47270  13.14790 H___A  1 0  0.31000
ATOM   3570  CA  PHE A 315   23.58598  64.31423  12.93228 C_3    4 0  0.16000
ATOM   3571 HCA  PHE A 315   23.10357  65.15726  13.41718 H_     1 0  0.00000
ATOM   3572  C   PHE A 315   22.80452  63.11965  13.34242 C_R    3 0  0.51000
ATOM   3573  O   PHE A 315   23.29687  61.99850  13.10615 O_2    1 2 -0.51000
ATOM   3574  CB  PHE A 315   23.46676  64.58190  11.40445 C_3    4 0  0.00000
ATOM   3575 HCB  PHE A 315   23.99490  65.51226  11.19264 H_     1 0  0.00000
ATOM   3576 HCB  PHE A 315   22.42121  64.77285  11.15647 H_     1 0  0.00000
ATOM   3577  CG  PHE A 315   23.96685  63.51712  10.49587 C_R    3 0  0.00000
ATOM   3578  CD1 PHE A 315   23.15027  62.41340  10.15095 C_R    3 0  0.00000
ATOM   3579 HCD1 PHE A 315   22.21337  62.32532  10.54724 H_     1 0  0.00000
ATOM   3580  CD2 PHE A 315   25.25264  63.61378   9.92146 C_R    3 0  0.00000
ATOM   3581 HCD2 PHE A 315   25.85935  64.40243  10.14985 H_     1 0  0.00000
ATOM   3582  CE1 PHE A 315   23.61259  61.42301   9.26592 C_R    3 0  0.00000
ATOM   3583 HCE1 PHE A 315   23.01923  60.62391   9.03390 H_     1 0  0.00000
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ATOM   3584  CE2 PHE A 315   25.71065  62.63116   9.02875 C_R   3 0  0.00000
ATOM   3585 HCE2 PHE A 315   26.63796  62.71179   8.62036 H_    1 0  0.00000
ATOM   3586  CZ  PHE A 315   24.89738  61.53278   8.70810 C_R   3 0  0.00000
ATOM   3587 HCZ  PHE A 315   25.25165  60.80465   8.08882 H_    1 0  0.00000
ATOM   3588  N   GLY A 316   21.57292  63.21700  13.89748 N_R   3 0 -0.47000
ATOM   3589 HN   GLY A 316   21.25196  64.09156  14.10507 H___A 1 0  0.31000
ATOM   3590  CA  GLY A 316   20.68486  62.13747  14.21673 C_3   4 0  0.16000
ATOM   3591 HCA  GLY A 316   20.52924  62.13318  15.28919 H_    1 0  0.00000
ATOM   3592 HCA  GLY A 316   21.11789  61.17538  13.96852 H_    1 0  0.00000
ATOM   3593  C   GLY A 316   19.35793  62.27371  13.57294 C_R   3 0  0.51000
ATOM   3594  O   GLY A 316   18.71054  63.33545  13.75709 O_2   1 2 -0.51000
ATOM   3595  N   LEU A 317   18.84629  61.25086  12.83834 N_R   3 0 -0.47000
ATOM   3596 HN   LEU A 317   19.40989  60.47352  12.76790 H___A 1 0  0.31000
ATOM   3597  CA  LEU A 317   17.52216  61.20633  12.25280 C_3   4 0  0.16000
ATOM   3598 HCA  LEU A 317   16.92969  61.98912  12.73651 H_    1 0  0.00000
ATOM   3599  C   LEU A 317   16.77118  59.96274  12.58270 C_R   3 0  0.51000
ATOM   3600  O   LEU A 317   17.37491  58.97509  13.06222 O_2   1 2 -0.51000
ATOM   3601  CB  LEU A 317   17.49827  61.57076  10.72947 C_3   4 0  0.00000
ATOM   3602 HCB  LEU A 317   17.96117  62.55340  10.63190 H_    1 0  0.00000
ATOM   3603 HCB  LEU A 317   16.45310  61.70920  10.44629 H_    1 0  0.00000
ATOM   3604  CG  LEU A 317   18.13285  60.65085   9.63648 C_3   4 0  0.00000
ATOM   3605 HCG  LEU A 317   17.93796  61.15693   8.68290 H_    1 0  0.00000
ATOM   3606  CD1 LEU A 317   19.67602  60.55423   9.72267 C_3   4 0  0.00000
ATOM   3607 HCD1 LEU A 317   19.98738  60.10138  10.65817 H_    1 0  0.00000
ATOM   3608 HCD1 LEU A 317   20.06588  59.95615   8.89838 H_    1 0  0.00000
ATOM   3609 HCD1 LEU A 317   20.11401  61.54862   9.64906 H_    1 0  0.00000
ATOM   3610  CD2 LEU A 317   17.46018  59.25925   9.49168 C_3   4 0  0.00000
ATOM   3611 HCD2 LEU A 317   16.38909  59.37535   9.31604 H_    1 0  0.00000
ATOM   3612 HCD2 LEU A 317   17.88414  58.72126   8.64249 H_    1 0  0.00000
ATOM   3613 HCD2 LEU A 317   17.60645  58.65282  10.38163 H_    1 0  0.00000
ATOM   3614  N   GLY A 318   15.43115  59.91477  12.36697 N_R   3 0 -0.47000
ATOM   3615 HN   GLY A 318   15.03864  60.69427  11.94299 H___A 1 0  0.31000
ATOM   3616  CA  GLY A 318   14.53594  58.84787  12.72709 C_3   4 0  0.16000
ATOM   3617 HCA  GLY A 318   13.64928  59.30441  13.16977 H_    1 0  0.00000
ATOM   3618 HCA  GLY A 318   14.97732  58.20886  13.49394 H_    1 0  0.00000
ATOM   3619  C   GLY A 318   14.11135  58.03192  11.56518 C_R   3 0  0.51000
ATOM   3620  O   GLY A 318   13.59444  58.60080  10.57114 O_2   1 2 -0.51000
ATOM   3621  N   VAL A 319   14.25870  56.68488  11.57693 N_R   3 0 -0.47000
ATOM   3622 HN   VAL A 319   14.49117  56.26962  12.40940 H___A 1 0  0.31000
ATOM   3623  CA  VAL A 319   14.06846  55.81248  10.44901 C_3   4 0  0.16000
ATOM   3624 HCA  VAL A 319   14.57006  56.28174   9.59221 H_    1 0  0.00000
ATOM   3625  C   VAL A 319   12.61727  55.67251  10.12798 C_R   3 0  0.51000
ATOM   3626  O   VAL A 319   12.25107  55.92835   8.95837 O_2   1 2 -0.51000
ATOM   3627  CB  VAL A 319   14.78131  54.43402  10.66457 C_3   4 0  0.00000
ATOM   3628 HCB  VAL A 319   14.28739  53.92613  11.49480 H_    1 0  0.00000
ATOM   3629  CG1 VAL A 319   14.67127  53.51105   9.41691 C_3   4 0  0.00000
ATOM   3630 HCG1 VAL A 319   15.11992  53.99867   8.55274 H_    1 0  0.00000
ATOM   3631 HCG1 VAL A 319   15.19324  52.56900   9.58304 H_    1 0  0.00000
ATOM   3632 HCG1 VAL A 319   13.62933  53.28085   9.19281 H_    1 0  0.00000
ATOM   3633  CG2 VAL A 319   16.28790  54.59540  11.02867 C_3   4 0  0.00000
ATOM   3634 HCG2 VAL A 319   16.41069  55.17274  11.94332 H_    1 0  0.00000
ATOM   3635 HCG2 VAL A 319   16.75090  53.62022  11.19013 H_    1 0  0.00000
ATOM   3636 HCG2 VAL A 319   16.82285  55.10719  10.22677 H_    1 0  0.00000
ATOM   3637  N   GLU A 320   11.69035  55.30085  11.04565 N_R   3 0 -0.47000
ATOM   3638 HN   GLU A 320   11.97539  55.00470  11.90979 H___A 1 0  0.31000
ATOM   3639  CA  GLU A 320   10.26594  55.20024  10.88730 C_3   4 0  0.16000
ATOM   3640 HCA  GLU A 320   10.07582  54.21306  10.45560 H_    1 0  0.00000
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ATOM    3641  C    GLU A  320     9.65895  56.21819  10.00009 C_R    3 0  0.51000
ATOM    3642  O    GLU A  320     8.99729  55.82429   9.01947 O_2    1 2 -0.51000
ATOM    3643  CB   GLU A  320     9.54299  55.27305  12.27314 C_3    4 0  0.00000
ATOM    3644 HCB   GLU A  320     8.49251  55.54524  12.12244 H_     1 0  0.00000
ATOM    3645 HCB   GLU A  320     9.98671  56.06111  12.88977 H_     1 0  0.00000
ATOM    3646  CG   GLU A  320     9.51746  53.93986  13.06338 C_3    4 0 -0.10000
ATOM    3647 HCG   GLU A  320     9.15843  53.15755  12.40141 H_     1 0  0.00000
ATOM    3648 HCG   GLU A  320     8.80287  54.01995  13.88290 H_     1 0  0.00000
ATOM    3649  CD   GLU A  320    10.78761  53.49910  13.64686 C_R    3 0  0.62000
ATOM    3650  OE1  GLU A  320    11.83246  54.18631  13.61743 O_2    1 2 -0.76000
ATOM    3651  OE2  GLU A  320    10.82976  52.39007  14.20755 O_2    1 2 -0.76000
ATOM    3652  N    ARG A  321     9.79278  57.54469  10.22116 N_R    3 0 -0.47000
ATOM    3653 HN    ARG A  321    10.35145  57.80647  10.96970 H___A  1 0  0.31000
ATOM    3654  CA   ARG A  321     9.15995  58.57234   9.43421 C_3    4 0  0.16000
ATOM    3655 HCA   ARG A  321     8.08512  58.39585   9.51555 H_     1 0  0.00000
ATOM    3656  C    ARG A  321     9.53146  58.47307   7.98947 C_R    3 0  0.51000
ATOM    3657  O    ARG A  321     8.65265  58.40885   7.08789 O_2    1 2 -0.51000
ATOM    3658  CB   ARG A  321     9.48371  59.97955  10.04040 C_3    4 0  0.00000
ATOM    3659 HCB   ARG A  321    10.27960  60.45780   9.46256 H_     1 0  0.00000
ATOM    3660 HCB   ARG A  321     9.87486  59.87571  11.05672 H_     1 0  0.00000
ATOM    3661  CG   ARG A  321     8.27080  60.95333  10.10103 C_3    4 0  0.00000
ATOM    3662 HCG   ARG A  321     7.74600  60.94356   9.14188 H_     1 0  0.00000
ATOM    3663 HCG   ARG A  321     8.65271  61.96560  10.25885 H_     1 0  0.00000
ATOM    3664  CD   ARG A  321     7.27485  60.62552  11.24660 C_3    4 0  0.38000
ATOM    3665 HCD   ARG A  321     7.81046  60.60354  12.19798 H_     1 0  0.00000
ATOM    3666 HCD   ARG A  321     6.84046  59.63624  11.10310 H_     1 0  0.00000
ATOM    3667  NE   ARG A  321     6.25597  61.61659  11.37063 N_R    3 0 -0.70000
ATOM    3668 HNE   ARG A  321     6.47041  62.38784  11.91158 H___A  1 0  0.44000
ATOM    3669  CZ   ARG A  321     5.02809  61.57027  10.84915 C_R    3 0  0.64000
ATOM    3670  NH1  ARG A  321     4.58760  60.61428  10.04337 N_R    3 0 -0.80000
ATOM    3671 HNH1  ARG A  321     3.67768  60.63013   9.72081 H___A  1 0  0.46000
ATOM    3672 HNH1  ARG A  321     5.17478  59.89076   9.79279 H___A  1 0  0.46000
ATOM    3673  NH2  ARG A  321     4.18489  62.54000  11.16073 N_R    3 0 -0.80000
ATOM    3674 HNH2  ARG A  321     3.28441  62.52864  10.81289 H___A  1 0  0.46000
ATOM    3675 HNH2  ARG A  321     4.46092  63.24181  11.76517 H___A  1 0  0.46000
ATOM    3676  N    LEU A  322    10.84413  58.37758   7.67773 N_R    3 0 -0.47000
ATOM    3677 HN    LEU A  322    11.47723  58.38050   8.41485 H___A  1 0  0.31000
ATOM    3678  CA   LEU A  322    11.36865  58.21078   6.35867 C_3    4 0  0.16000
ATOM    3679 HCA   LEU A  322    10.97239  59.04396   5.77218 H_     1 0  0.00000
ATOM    3680  C    LEU A  322    10.94178  56.92284   5.74365 C_R    3 0  0.51000
ATOM    3681  O    LEU A  322    10.49298  56.96008   4.57949 O_2    1 2 -0.51000
ATOM    3682  CB   LEU A  322    12.91326  58.36996   6.40198 C_3    4 0  0.00000
ATOM    3683 HCB   LEU A  322    13.32409  57.57943   7.03992 H_     1 0  0.00000
ATOM    3684 HCB   LEU A  322    13.14038  59.32222   6.89060 H_     1 0  0.00000
ATOM    3685  CG   LEU A  322    13.64987  58.32956   5.02419 C_3    4 0  0.00000
ATOM    3686 HCG   LEU A  322    13.49123  57.34086   4.59083 H_     1 0  0.00000
ATOM    3687  CD1  LEU A  322    13.13469  59.36548   3.98524 C_3    4 0  0.00000
ATOM    3688 HCD1  LEU A  322    13.22939  60.38165   4.36956 H_     1 0  0.00000
ATOM    3689 HCD1  LEU A  322    13.70579  59.28539   3.05983 H_     1 0  0.00000
ATOM    3690 HCD1  LEU A  322    12.09091  59.18076   3.73305 H_     1 0  0.00000
ATOM    3691  CD2  LEU A  322    15.17625  58.49851   5.24017 C_3    4 0  0.00000
ATOM    3692 HCD2  LEU A  322    15.54752  57.71944   5.90663 H_     1 0  0.00000
ATOM    3693 HCD2  LEU A  322    15.70481  58.41599   4.29139 H_     1 0  0.00000
ATOM    3694 HCD2  LEU A  322    15.40415  59.46973   5.68188 H_     1 0  0.00000
ATOM    3695  N    ALA A  323    10.97485  55.74342   6.40900 N_R    3 0 -0.47000
ATOM    3696 HN    ALA A  323    11.37563  55.76680   7.27597 H___A  1 0  0.31000
ATOM    3697  CA   ALA A  323    10.45744  54.48280   5.92974 C_3    4 0  0.16000
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ATOM    3698 HCA   ALA A  323   11.03750  54.20421   5.04287 H_     1 0  0.00000
ATOM    3699  C    ALA A  323    9.01086  54.55038   5.56683 C_R    3 0  0.51000
ATOM    3700  O    ALA A  323    8.65165  54.20922   4.41016 O_2    1 2 -0.51000
ATOM    3701  CB   ALA A  323   10.68188  53.37070   6.98532 C_3    4 0  0.00000
ATOM    3702 HCB   ALA A  323   10.16594  53.60751   7.91557 H_     1 0  0.00000
ATOM    3703 HCB   ALA A  323   10.30940  52.41348   6.61443 H_     1 0  0.00000
ATOM    3704 HCB   ALA A  323   11.74345  53.25944   7.20144 H_     1 0  0.00000
ATOM    3705  N    MET A  324    8.11213  55.03013   6.46679 N_R    3 0 -0.47000
ATOM    3706 HN    MET A  324    8.44735  55.27257   7.32145 H___A  1 0  0.31000
ATOM    3707  CA   MET A  324    6.70670  55.23976   6.26983 C_3    4 0  0.16000
ATOM    3708 HCA   MET A  324    6.26217  54.25622   6.16167 H_     1 0  0.00000
ATOM    3709  C    MET A  324    6.45548  56.00080   5.03558 C_R    3 0  0.51000
ATOM    3710  O    MET A  324    5.64429  55.54557   4.19946 O_2    1 2 -0.51000
ATOM    3711  CB   MET A  324    5.99966  55.98409   7.44933 C_3    4 0  0.00000
ATOM    3712 HCB   MET A  324    5.03028  56.36231   7.11159 H_     1 0  0.00000
ATOM    3713 HCB   MET A  324    6.59673  56.85087   7.73597 H_     1 0  0.00000
ATOM    3714  CG   MET A  324    5.73763  55.11164   8.69889 C_3    4 0  0.04000
ATOM    3715 HCG   MET A  324    6.66721  54.97672   9.23834 H_     1 0  0.00000
ATOM    3716 HCG   MET A  324    5.37436  54.13258   8.39824 H_     1 0  0.00000
ATOM    3717  SD   MET A  324    4.47663  55.77544   9.81642 S_3    2 0 -0.09000
ATOM    3718  CE   MET A  324    5.43517  57.11532  10.54633 C_3    4 0  0.05000
ATOM    3719 HCE   MET A  324    5.70860  57.82964   9.77349 H_     1 0  0.00000
ATOM    3720 HCE   MET A  324    4.82618  57.62236  11.29275 H_     1 0  0.00000
ATOM    3721 HCE   MET A  324    6.33306  56.72366  11.02442 H_     1 0  0.00000
ATOM    3722  N    LEU A  325    7.11270  57.15706   4.80963 N_R    3 0 -0.47000
ATOM    3723 HN    LEU A  325    7.65715  57.51803   5.52013 H___A  1 0  0.31000
ATOM    3724  CA   LEU A  325    7.02121  57.86009   3.56918 C_3    4 0  0.16000
ATOM    3725 HCA   LEU A  325    5.96416  58.10492   3.41253 H_     1 0  0.00000
ATOM    3726  C    LEU A  325    7.51098  57.05002   2.40828 C_R    3 0  0.51000
ATOM    3727  O    LEU A  325    6.70855  56.68439   1.51539 O_2    1 2 -0.51000
ATOM    3728  CB   LEU A  325    7.77748  59.20299   3.73790 C_3    4 0  0.00000
ATOM    3729 HCB   LEU A  325    8.83643  58.99755   3.92396 H_     1 0  0.00000
ATOM    3730 HCB   LEU A  325    7.40697  59.67160   4.65743 H_     1 0  0.00000
ATOM    3731  CG   LEU A  325    7.60399  60.18450   2.52720 C_3    4 0  0.00000
ATOM    3732 HCG   LEU A  325    6.89866  59.76302   1.80517 H_     1 0  0.00000
ATOM    3733  CD1  LEU A  325    6.98154  61.52457   2.99494 C_3    4 0  0.00000
ATOM    3734 HCD1  LEU A  325    7.58787  61.96985   3.78197 H_     1 0  0.00000
ATOM    3735 HCD1  LEU A  325    6.90858  62.22532   2.16866 H_     1 0  0.00000
ATOM    3736 HCD1  LEU A  325    5.97700  61.35612   3.38895 H_     1 0  0.00000
ATOM    3737  CD2  LEU A  325    8.94238  60.38287   1.76741 C_3    4 0  0.00000
ATOM    3738 HCD2  LEU A  325    9.29089  59.43158   1.36203 H_     1 0  0.00000
ATOM    3739 HCD2  LEU A  325    8.81335  61.07509   0.93820 H_     1 0  0.00000
ATOM    3740 HCD2  LEU A  325    9.71213  60.77438   2.43345 H_     1 0  0.00000
ATOM    3741  N    ARG A  326    8.80784  56.67814   2.32340 N_R    3 0 -0.47000
ATOM    3742 HN    ARG A  326    9.35018  56.82372   3.09220 H___A  1 0  0.31000
ATOM    3743  CA   ARG A  326    9.47645  56.12657   1.17969 C_3    4 0  0.16000
ATOM    3744 HCA   ARG A  326    9.42404  56.89774   0.40311 H_     1 0  0.00000
ATOM    3745  C    ARG A  326    8.85257  54.88169   0.66642 C_R    3 0  0.51000
ATOM    3746  O    ARG A  326    8.76843  54.75239  -0.57811 O_2    1 2 -0.51000
ATOM    3747  CB   ARG A  326   10.98145  55.91420   1.51580 C_3    4 0  0.00000
ATOM    3748 HCB   ARG A  326   11.09048  55.05902   2.18991 H_     1 0  0.00000
ATOM    3749 HCB   ARG A  326   11.33675  56.80098   2.04886 H_     1 0  0.00000
ATOM    3750  CG   ARG A  326   11.90891  55.72605   0.27932 C_3    4 0  0.00000
ATOM    3751 HCG   ARG A  326   11.77486  56.57483  -0.39170 H_     1 0  0.00000
ATOM    3752 HCG   ARG A  326   11.63109  54.82213  -0.26558 H_     1 0  0.00000
ATOM    3753  CD   ARG A  326   13.39506  55.62509   0.71727 C_3    4 0  0.38000
ATOM    3754 HCD   ARG A  326   13.50998  54.69135   1.26661 H_     1 0  0.00000
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ATOM    3755 HCD   ARG A  326   13.63554  56.44728   1.39652 H_     1 0  0.00000
ATOM    3756  NE   ARG A  326   14.38678  55.60442  -0.29965 N_R    3 0 -0.70000
ATOM    3757 HNE   ARG A  326   14.98669  54.84974  -0.28963 H___A  1 0  0.44000
ATOM    3758  CZ   ARG A  326   14.65787  56.58437  -1.16192 C_R    3 0  0.64000
ATOM    3759  NH1  ARG A  326   14.01996  57.73253  -1.29802 N_R    3 0 -0.80000
ATOM    3760 HNH1  ARG A  326   14.40230  58.33823  -1.92986 H___A  1 0  0.46000
ATOM    3761 HNH1  ARG A  326   13.23813  57.94638  -0.78105 H___A  1 0  0.46000
ATOM    3762  NH2  ARG A  326   15.70368  56.46832  -1.94821 N_R    3 0 -0.80000
ATOM    3763 HNH2  ARG A  326   15.91610  57.19253  -2.54485 H___A  1 0  0.46000
ATOM    3764 HNH2  ARG A  326   16.23471  55.67787  -1.84288 H___A  1 0  0.46000
ATOM    3765  N    TYR A  327    8.36527  53.93091   1.50501 N_R    3 0 -0.47000
ATOM    3766 HN    TYR A  327    8.46601  54.06141   2.45276 H___A  1 0  0.31000
ATOM    3767  CA   TYR A  327    7.68524  52.73565   1.07084 C_3    4 0  0.16000
ATOM    3768 HCA   TYR A  327    7.71614  52.65305  -0.01932 H_     1 0  0.00000
ATOM    3769  C    TYR A  327    6.22278  52.78114   1.39173 C_R    3 0  0.51000
ATOM    3770  O    TYR A  327    5.57487  51.70751   1.36089 O_2    1 2 -0.51000
ATOM    3771  CB   TYR A  327    8.40408  51.44992   1.60076 C_3    4 0  0.00000
ATOM    3772 HCB   TYR A  327    8.10289  50.59965   0.98180 H_     1 0  0.00000
ATOM    3773 HCB   TYR A  327    8.03125  51.25676   2.60381 H_     1 0  0.00000
ATOM    3774  CG   TYR A  327    9.89769  51.46344   1.64079 C_R    3 0  0.00000
ATOM    3775  CD1  TYR A  327   10.67762  51.94082   0.55818 C_R    3 0  0.00000
ATOM    3776 HCD1  TYR A  327   10.22472  52.24014  -0.31062 H_     1 0  0.00000
ATOM    3777  CD2  TYR A  327   10.57672  50.96204   2.77852 C_R    3 0  0.00000
ATOM    3778 HCD2  TYR A  327   10.05557  50.56118   3.56273 H_     1 0  0.00000
ATOM    3779  CE1  TYR A  327   12.08180  52.02596   0.65932 C_R    3 0  0.00000
ATOM    3780 HCE1  TYR A  327   12.62385  52.41307  -0.11563 H_     1 0  0.00000
ATOM    3781  CE2  TYR A  327   11.97996  51.00818   2.86013 C_R    3 0  0.00000
ATOM    3782 HCE2  TYR A  327   12.44583  50.64250   3.68945 H_     1 0  0.00000
ATOM    3783  CZ   TYR A  327   12.73248  51.59080   1.82619 C_R    3 0  0.11000
ATOM    3784  OH   TYR A  327   14.06404  51.74247   1.99694 O_R    2 2 -0.54000
ATOM    3785 HOH   TYR A  327   14.64696  52.19885   1.36702 H___A  1 0  0.43000
ATOM    3786  N    GLY A  328    5.54573  53.93917   1.62433 N_R    3 0 -0.47000
ATOM    3787 HN    GLY A  328    6.02851  54.77382   1.62150 H___A  1 0  0.31000
ATOM    3788  CA   GLY A  328    4.11416  54.05194   1.74116 C_3    4 0  0.16000
ATOM    3789 HCA   GLY A  328    3.69089  53.80446   0.76358 H_     1 0  0.00000
ATOM    3790 HCA   GLY A  328    3.89163  55.10603   1.91652 H_     1 0  0.00000
ATOM    3791  C    GLY A  328    3.41834  53.26556   2.79992 C_R    3 0  0.51000
ATOM    3792  O    GLY A  328    2.52942  52.44736   2.46518 O_2    1 2 -0.51000
ATOM    3793  N    ILE A  329    3.67790  53.48764   4.11039 N_R    3 0 -0.47000
ATOM    3794 HN    ILE A  329    4.34524  54.15227   4.25863 H___A  1 0  0.31000
ATOM    3795  CA   ILE A  329    3.02934  52.87173   5.25035 C_3    4 0  0.16000
ATOM    3796 HCA   ILE A  329    2.32325  52.12534   4.88849 H_     1 0  0.00000
ATOM    3797  C    ILE A  329    2.29009  53.91770   6.03287 C_R    3 0  0.51000
ATOM    3798  O    ILE A  329    2.97605  54.87668   6.46014 O_2    1 2 -0.51000
ATOM    3799  CB   ILE A  329    4.02805  52.08323   6.17266 C_3    4 0  0.00000
ATOM    3800 HCB   ILE A  329    4.70311  52.79766   6.63010 H_     1 0  0.00000
ATOM    3801  CG1  ILE A  329    4.89309  51.04103   5.38655 C_3    4 0  0.00000
ATOM    3802 HCG1  ILE A  329    4.36651  50.72172   4.48308 H_     1 0  0.00000
ATOM    3803 HCG1  ILE A  329    5.05587  50.14691   5.98748 H_     1 0  0.00000
ATOM    3804  CG2  ILE A  329    3.30000  51.41415   7.37862 C_3    4 0  0.00000
ATOM    3805 HCG2  ILE A  329    2.53217  50.73217   7.01962 H_     1 0  0.00000
ATOM    3806 HCG2  ILE A  329    4.00733  50.86269   7.99960 H_     1 0  0.00000
ATOM    3807 HCG2  ILE A  329    2.82985  52.16436   8.01370 H_     1 0  0.00000
ATOM    3808  CD1  ILE A  329    6.30272  51.53595   4.99558 C_3    4 0  0.00000
ATOM    3809 HCD1  ILE A  329    6.87065  51.80620   5.88504 H_     1 0  0.00000
ATOM    3810 HCD1  ILE A  329    6.83140  50.73137   4.49023 H_     1 0  0.00000
ATOM    3811 HCD1  ILE A  329    6.23953  52.39750   4.33403 H_     1 0  0.00000
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ATOM    3812  N    PRO A  330     0.95298  53.89322   6.33858 N_R    3 0 -0.29000
ATOM    3813  CA   PRO A  330     0.30553  54.90387   7.14214 C_3    4 0  0.11000
ATOM    3814 HCA   PRO A  330     0.58353  55.89188   6.75355 H_     1 0  0.00000
ATOM    3815  C    PRO A  330     0.60356  54.84907   8.57991 C_2    3 0  0.51000
ATOM    3816  O    PRO A  330     0.98613  55.87777   9.12188 O_2    1 2 -0.51000
ATOM    3817  CB   PRO A  330    -1.20382  54.71910   6.84866 C_3    4 0  0.00000
ATOM    3818 HCB   PRO A  330    -1.49840  55.34316   5.99861 H_     1 0  0.00000
ATOM    3819 HCB   PRO A  330    -1.84605  54.97021   7.69845 H_     1 0  0.00000
ATOM    3820  CG   PRO A  330    -1.33704  53.24237   6.46030 C_3    4 0  0.00000
ATOM    3821 HCG   PRO A  330    -2.14392  53.08544   5.73927 H_     1 0  0.00000
ATOM    3822 HCG   PRO A  330    -1.53207  52.63872   7.35001 H_     1 0  0.00000
ATOM    3823  CD   PRO A  330     0.03844  52.89725   5.86456 C_3    4 0  0.18000
ATOM    3824 HCD   PRO A  330     0.33673  51.89393   6.17967 H_     1 0  0.00000
ATOM    3825 HCD   PRO A  330    -0.01256  52.93745   4.77218 H_     1 0  0.00000
ATOM    3826  N    ASP A  331     0.41526  53.75020   9.29696 N_R    3 0 -0.47000
ATOM    3827 HN    ASP A  331     0.21409  52.93677   8.81452 H___A  1 0  0.31000
ATOM    3828  CA   ASP A  331     0.41859  53.66151  10.73900 C_3    4 0  0.16000
ATOM    3829 HCA   ASP A  331     0.31534  54.66783  11.15668 H_     1 0  0.00000
ATOM    3830  C    ASP A  331     1.68442  53.06161  11.27435 C_R    3 0  0.51000
ATOM    3831  O    ASP A  331     1.98746  51.86271  11.04239 O_2    1 2 -0.51000
ATOM    3832  CB   ASP A  331    -0.86128  52.89518  11.19528 C_3    4 0 -0.10000
ATOM    3833 HCB   ASP A  331    -0.80392  51.85713  10.86455 H_     1 0  0.00000
ATOM    3834 HCB   ASP A  331    -1.74412  53.34383  10.73096 H_     1 0  0.00000
ATOM    3835  CG   ASP A  331    -1.03916  52.89622  12.65967 C_R    3 0  0.62000
ATOM    3836  OD1  ASP A  331    -0.07510  52.58639  13.38282 O_2    1 2 -0.76000
ATOM    3837  OD2  ASP A  331    -2.11095  53.18086  13.24255 O_2    1 2 -0.76000
ATOM    3838  N    ILE A  332     2.46132  53.80214  12.10025 N_R    3 0 -0.47000
ATOM    3839 HN    ILE A  332     2.14125  54.68486  12.30584 H___A  1 0  0.31000
ATOM    3840  CA   ILE A  332     3.71345  53.40291  12.69364 C_3    4 0  0.16000
ATOM    3841 HCA   ILE A  332     4.40398  53.28410  11.85389 H_     1 0  0.00000
ATOM    3842  C    ILE A  332     3.66067  52.10501  13.43612 C_R    3 0  0.51000
ATOM    3843  O    ILE A  332     4.63552  51.31439  13.36104 O_2    1 2 -0.51000
ATOM    3844  CB   ILE A  332     4.24156  54.58529  13.58705 C_3    4 0  0.00000
ATOM    3845 HCB   ILE A  332     4.05756  55.50967  13.02897 H_     1 0  0.00000
ATOM    3846  CG1  ILE A  332     5.78066  54.55392  13.84793 C_3    4 0  0.00000
ATOM    3847 HCG1  ILE A  332     6.29348  54.35149  12.90506 H_     1 0  0.00000
ATOM    3848 HCG1  ILE A  332     6.02583  53.74172  14.53739 H_     1 0  0.00000
ATOM    3849  CG2  ILE A  332     3.44116  54.69179  14.91419 C_3    4 0  0.00000
ATOM    3850 HCG2  ILE A  332     3.65083  53.84708  15.56586 H_     1 0  0.00000
ATOM    3851 HCG2  ILE A  332     3.69153  55.60422  15.44639 H_     1 0  0.00000
ATOM    3852 HCG2  ILE A  332     2.37597  54.69796  14.70266 H_     1 0  0.00000
ATOM    3853  CD1  ILE A  332     6.36047  55.88505  14.39936 C_3    4 0  0.00000
ATOM    3854 HCD1  ILE A  332     5.92943  56.13288  15.36606 H_     1 0  0.00000
ATOM    3855 HCD1  ILE A  332     7.43643  55.80579  14.53241 H_     1 0  0.00000
ATOM    3856 HCD1  ILE A  332     6.16156  56.69983  13.70358 H_     1 0  0.00000
ATOM    3857  N    ARG A  333     2.54822  51.71281  14.11702 N_R    3 0 -0.47000
ATOM    3858 HN    ARG A  333     1.72357  52.17184  13.95014 H___A  1 0  0.31000
ATOM    3859  CA   ARG A  333     2.47622  50.55254  14.96143 C_3    4 0  0.16000
ATOM    3860 HCA   ARG A  333     3.26793  50.64513  15.71344 H_     1 0  0.00000
ATOM    3861  C    ARG A  333     2.71920  49.31509  14.17157 C_R    3 0  0.51000
ATOM    3862  O    ARG A  333     3.14161  48.29826  14.77931 O_2    1 2 -0.51000
ATOM    3863  CB   ARG A  333     1.11682  50.39172  15.71097 C_3    4 0  0.00000
ATOM    3864 HCB   ARG A  333     1.15525  49.44098  16.25297 H_     1 0  0.00000
ATOM    3865 HCB   ARG A  333     0.31688  50.28412  14.97364 H_     1 0  0.00000
ATOM    3866  CG   ARG A  333     0.73515  51.47763  16.77246 C_3    4 0  0.00000
ATOM    3867 HCG   ARG A  333     1.63981  51.91996  17.19499 H_     1 0  0.00000
ATOM    3868 HCG   ARG A  333     0.20453  50.96823  17.58122 H_     1 0  0.00000
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ATOM    3869  CD   ARG A  333   -0.19623  52.59959  16.25221 C_3    4 0  0.38000
ATOM    3870 HCD   ARG A  333   -0.88826  52.13300  15.55327 H_     1 0  0.00000
ATOM    3871 HCD   ARG A  333    0.40291  53.35357  15.74172 H_     1 0  0.00000
ATOM    3872  NE   ARG A  333   -0.98543  53.25379  17.24803 N_R    3 0 -0.70000
ATOM    3873 HNE   ARG A  333   -0.60666  53.49364  18.09755 H___A  1 0  0.44000
ATOM    3874  CZ   ARG A  333   -2.26633  53.59914  17.09901 C_R    3 0  0.64000
ATOM    3875  NH1  ARG A  333   -2.98270  53.56606  15.97890 N_R    3 0 -0.80000
ATOM    3876 HNH1  ARG A  333   -3.91313  53.80715  16.00669 H___A  1 0  0.46000
ATOM    3877 HNH1  ARG A  333   -2.58726  53.35766  15.12262 H___A  1 0  0.46000
ATOM    3878  NH2  ARG A  333   -2.82438  54.04970  18.20637 N_R    3 0 -0.80000
ATOM    3879 HNH2  ARG A  333   -3.75242  54.30440  18.25278 H___A  1 0  0.46000
ATOM    3880 HNH2  ARG A  333   -2.22664  54.15748  18.94823 H___A  1 0  0.46000
ATOM    3881  N    TYR A  334    2.55901  49.27684  12.81644 N_R    3 0 -0.47000
ATOM    3882 HN    TYR A  334    2.29695  50.08694  12.35121 H___A  1 0  0.31000
ATOM    3883  CA   TYR A  334    2.84842  48.10884  12.03464 C_3    4 0  0.16000
ATOM    3884 HCA   TYR A  334    2.18495  47.31885  12.40114 H_     1 0  0.00000
ATOM    3885  C    TYR A  334    4.25122  47.64113  12.23947 C_R    3 0  0.51000
ATOM    3886  O    TYR A  334    4.46612  46.40417  12.18912 O_2    1 2 -0.51000
ATOM    3887  CB   TYR A  334    2.57394  48.31052  10.51359 C_3    4 0  0.00000
ATOM    3888 HCB   TYR A  334    2.96028  47.44488   9.97781 H_     1 0  0.00000
ATOM    3889 HCB   TYR A  334    3.14578  49.18013  10.17496 H_     1 0  0.00000
ATOM    3890  CG   TYR A  334    1.14231  48.42392  10.11207 C_R    3 0  0.00000
ATOM    3891  CD1  TYR A  334    0.22140  47.38365  10.39140 C_R    3 0  0.00000
ATOM    3892 HCD1  TYR A  334    0.53312  46.52608  10.85600 H_     1 0  0.00000
ATOM    3893  CD2  TYR A  334    0.67658  49.54576   9.38728 C_R    3 0  0.00000
ATOM    3894 HCD2  TYR A  334    1.31655  50.29407   9.12441 H_     1 0  0.00000
ATOM    3895  CE1  TYR A  334   -1.13627  47.50359  10.03067 C_R    3 0  0.00000
ATOM    3896 HCE1  TYR A  334   -1.78889  46.75016  10.25907 H_     1 0  0.00000
ATOM    3897  CE2  TYR A  334   -0.67346  49.65780   9.00871 C_R    3 0  0.00000
ATOM    3898 HCE2  TYR A  334   -0.98882  50.48035   8.49209 H_     1 0  0.00000
ATOM    3899  CZ   TYR A  334   -1.59087  48.65370   9.35938 C_R    3 0  0.11000
ATOM    3900  OH   TYR A  334   -2.90085  48.80607   9.05849 O_R    2 2 -0.54000
ATOM    3901 HOH   TYR A  334   -3.55340  48.13369   9.32822 H___A  1 0  0.43000
ATOM    3902  N    PHE A  335    5.26094  48.48759  12.57721 N_R    3 0 -0.47000
ATOM    3903 HN    PHE A  335    5.05050  49.41367  12.75952 H___A  1 0  0.31000
ATOM    3904  CA   PHE A  335    6.62236  48.05474  12.77371 C_3    4 0  0.16000
ATOM    3905 HCA   PHE A  335    6.87726  47.40672  11.92927 H_     1 0  0.00000
ATOM    3906  C    PHE A  335    6.81077  47.22833  13.99844 C_R    3 0  0.51000
ATOM    3907  O    PHE A  335    7.90460  46.62861  14.13602 O_2    1 2 -0.51000
ATOM    3908  CB   PHE A  335    7.61543  49.25008  12.74562 C_3    4 0  0.00000
ATOM    3909 HCB   PHE A  335    8.64228  48.87468  12.77316 H_     1 0  0.00000
ATOM    3910 HCB   PHE A  335    7.46868  49.84218  13.65462 H_     1 0  0.00000
ATOM    3911  CG   PHE A  335    7.48409  50.09979  11.53121 C_R    3 0  0.00000
ATOM    3912  CD1  PHE A  335    7.68363  49.57157  10.23262 C_R    3 0  0.00000
ATOM    3913 HCD1  PHE A  335    7.92718  48.58772  10.10858 H_     1 0  0.00000
ATOM    3914  CD2  PHE A  335    7.16284  51.46721  11.65670 C_R    3 0  0.00000
ATOM    3915 HCD2  PHE A  335    7.02661  51.88506  12.57852 H_     1 0  0.00000
ATOM    3916  CE1  PHE A  335    7.55423  50.39063   9.09438 C_R    3 0  0.00000
ATOM    3917 HCE1  PHE A  335    7.68907  50.00069   8.16144 H_     1 0  0.00000
ATOM    3918  CE2  PHE A  335    7.04128  52.28437  10.52412 C_R    3 0  0.00000
ATOM    3919 HCE2  PHE A  335    6.81408  53.26617  10.65156 H_     1 0  0.00000
ATOM    3920  CZ   PHE A  335    7.23999  51.75159   9.23963 C_R    3 0  0.00000
ATOM    3921 HCZ   PHE A  335    7.16014  52.34862   8.41492 H_     1 0  0.00000
ATOM    3922  N    PHE A  336    5.81773  47.05552  14.90637 N_R    3 0 -0.47000
ATOM    3923 HN    PHE A  336    5.00243  47.55803  14.81100 H___A  1 0  0.31000
ATOM    3924  CA   PHE A  336    5.82716  46.11071  15.98927 C_3    4 0  0.16000
ATOM    3925 HCA   PHE A  336    6.64274  45.39079  15.86649 H_     1 0  0.00000
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ATOM   3926  C    PHE A  336    4.61265  45.25096  15.93402 C_R    3 0  0.51000
ATOM   3927  O    PHE A  336    4.31533  44.54093  16.92521 O_2    1 2 -0.51000
ATOM   3928  CB   PHE A  336    6.04582  46.88238  17.33128 C_3    4 0  0.00000
ATOM   3929 HCB   PHE A  336    5.70054  46.29338  18.18492 H_     1 0  0.00000
ATOM   3930 HCB   PHE A  336    5.45429  47.80313  17.33188 H_     1 0  0.00000
ATOM   3931  CG   PHE A  336    7.49358  47.17691  17.52500 C_R    3 0  0.00000
ATOM   3932  CD1  PHE A  336    8.36560  46.14715  17.95636 C_R    3 0  0.00000
ATOM   3933 HCD1  PHE A  336    7.99611  45.22275  18.19352 H_     1 0  0.00000
ATOM   3934  CD2  PHE A  336    8.03981  48.44654  17.22231 C_R    3 0  0.00000
ATOM   3935 HCD2  PHE A  336    7.43406  49.21341  16.92096 H_     1 0  0.00000
ATOM   3936  CE1  PHE A  336    9.75155  46.36648  18.04544 C_R    3 0  0.00000
ATOM   3937 HCE1  PHE A  336   10.37137  45.61150  18.34867 H_     1 0  0.00000
ATOM   3938  CE2  PHE A  336    9.42889  48.66239  17.30334 C_R    3 0  0.00000
ATOM   3939 HCE2  PHE A  336    9.81950  49.57503  17.06275 H_     1 0  0.00000
ATOM   3940  CZ   PHE A  336   10.28395  47.62080  17.70555 C_R    3 0  0.00000
ATOM   3941 HCZ   PHE A  336   11.29303  47.77412  17.75290 H_     1 0  0.00000
ATOM   3942  N    GLY A  337    3.90407  45.09787  14.78412 N_R    3 0 -0.47000
ATOM   3943 HN    GLY A  337    4.16396  45.59432  14.00200 H___A  1 0  0.31000
ATOM   3944  CA   GLY A  337    2.83022  44.17466  14.59550 C_3    4 0  0.16000
ATOM   3945 HCA   GLY A  337    2.09705  44.64599  13.93884 H_     1 0  0.00000
ATOM   3946 HCA   GLY A  337    2.31838  43.94658  15.53453 H_     1 0  0.00000
ATOM   3947  C    GLY A  337    3.31711  42.93436  13.94927 C_R    3 0  0.51000
ATOM   3948  O    GLY A  337    3.90990  43.03317  12.84536 O_2    1 2 -0.51000
ATOM   3949  N    GLY A  338    3.08755  41.71865  14.51502 N_R    3 0 -0.47000
ATOM   3950 HN    GLY A  338    2.64993  41.72188  15.38146 H___A  1 0  0.31000
ATOM   3951  CA   GLY A  338    3.40925  40.43379  13.94689 C_3    4 0  0.16000
ATOM   3952 HCA   GLY A  338    3.34819  39.69294  14.74671 H_     1 0  0.00000
ATOM   3953 HCA   GLY A  338    4.44034  40.43999  13.58615 H_     1 0  0.00000
ATOM   3954  C    GLY A  338    2.50756  40.03298  12.83511 C_R    3 0  0.51000
ATOM   3955  O    GLY A  338    1.88578  38.94457  12.83094 O_2    1 2 -0.51000
ATOM   3956  N    ARG A  339    2.36716  40.90656  11.82165 N_R    3 0 -0.47000
ATOM   3957 HN    ARG A  339    2.90818  41.68233  11.94869 H___A  1 0  0.31000
ATOM   3958  CA   ARG A  339    1.46455  40.86792  10.71886 C_3    4 0  0.16000
ATOM   3959 HCA   ARG A  339    0.67565  40.13465  10.91226 H_     1 0  0.00000
ATOM   3960  C    ARG A  339    2.19586  40.44888   9.49130 C_R    3 0  0.51000
ATOM   3961  O    ARG A  339    2.68131  41.28069   8.68663 O_2    1 2 -0.51000
ATOM   3962  CB   ARG A  339    0.78138  42.26954  10.65474 C_3    4 0  0.00000
ATOM   3963 HCB   ARG A  339    1.55277  43.02345  10.47680 H_     1 0  0.00000
ATOM   3964 HCB   ARG A  339    0.34405  42.49971  11.63114 H_     1 0  0.00000
ATOM   3965  CG   ARG A  339   -0.32922  42.44038   9.57942 C_3    4 0  0.00000
ATOM   3966 HCG   ARG A  339    0.01713  42.03202   8.62998 H_     1 0  0.00000
ATOM   3967 HCG   ARG A  339   -0.49787  43.51161   9.43659 H_     1 0  0.00000
ATOM   3968  CD   ARG A  339   -1.68622  41.78913   9.93467 C_3    4 0  0.38000
ATOM   3969 HCD   ARG A  339   -2.08360  42.23701  10.84984 H_     1 0  0.00000
ATOM   3970 HCD   ARG A  339   -1.54667  40.71702  10.09444 H_     1 0  0.00000
ATOM   3971  NE   ARG A  339   -2.61040  41.99802   8.86694 N_R    3 0 -0.70000
ATOM   3972 HNE   ARG A  339   -2.34931  42.61466   8.16917 H___A  1 0  0.44000
ATOM   3973  CZ   ARG A  339   -3.81808  41.44186   8.76176 C_R    3 0  0.64000
ATOM   3974  NH1  ARG A  339   -4.33449  40.61666   9.66158 N_R    3 0 -0.80000
ATOM   3975 HNH1  ARG A  339   -5.21544  40.24258   9.52884 H___A  1 0  0.46000
ATOM   3976 HNH1  ARG A  339   -3.83244  40.39881  10.45826 H___A  1 0  0.46000
ATOM   3977  NH2  ARG A  339   -4.54659  41.72579   7.69509 N_R    3 0 -0.80000
ATOM   3978 HNH2  ARG A  339   -5.42590  41.33807   7.59188 H___A  1 0  0.46000
ATOM   3979 HNH2  ARG A  339   -4.20333  42.32705   7.01957 H___A  1 0  0.46000
ATOM   3980  N    LEU A  340    2.28221  39.12903   9.20394 N_R    3 0 -0.47000
ATOM   3981 HN    LEU A  340    1.97158  38.52029   9.89233 H___A  1 0  0.31000
ATOM   3982  CA   LEU A  340    2.81724  38.56417   7.99226 C_3    4 0  0.16000
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ATOM    3983 HCA   LEU A  340     3.89148  38.75122   7.99652 H_     1 0  0.00000
ATOM    3984  C    LEU A  340     2.23631  39.22673   6.79311 C_R    3 0  0.51000
ATOM    3985  O    LEU A  340     3.00430  39.73685   5.95034 O_2    1 2 -0.51000
ATOM    3986  CB   LEU A  340     2.58029  37.02003   7.94170 C_3    4 0  0.00000
ATOM    3987 HCB   LEU A  340     2.59709  36.68356   6.90181 H_     1 0  0.00000
ATOM    3988 HCB   LEU A  340     1.57156  36.80847   8.31096 H_     1 0  0.00000
ATOM    3989  CG   LEU A  340     3.59859  36.11984   8.71310 C_3    4 0  0.00000
ATOM    3990 HCG   LEU A  340     3.21065  35.09692   8.64956 H_     1 0  0.00000
ATOM    3991  CD1  LEU A  340     5.00159  36.08289   8.04145 C_3    4 0  0.00000
ATOM    3992 HCD1  LEU A  340     5.47369  37.06479   8.04636 H_     1 0  0.00000
ATOM    3993 HCD1  LEU A  340     5.65608  35.38867   8.57044 H_     1 0  0.00000
ATOM    3994 HCD1  LEU A  340     4.91703  35.74248   7.00759 H_     1 0  0.00000
ATOM    3995  CD2  LEU A  340     3.69732  36.45079  10.22545 C_3    4 0  0.00000
ATOM    3996 HCD2  LEU A  340     2.71133  36.38514  10.68945 H_     1 0  0.00000
ATOM    3997 HCD2  LEU A  340     4.35527  35.73879  10.72616 H_     1 0  0.00000
ATOM    3998 HCD2  LEU A  340     4.09648  37.45331  10.38209 H_     1 0  0.00000
ATOM    3999  N    LYS A  341     0.89742  39.36985   6.65960 N_R    3 0 -0.47000
ATOM    4000 HN    LYS A  341     0.35268  38.97959   7.35596 H___A  1 0  0.31000
ATOM    4001  CA   LYS A  341     0.23077  40.03236   5.56664 C_3    4 0  0.16000
ATOM    4002 HCA   LYS A  341     0.65893  39.60585   4.66153 H_     1 0  0.00000
ATOM    4003  C    LYS A  341     0.49847  41.50001   5.44185 C_R    3 0  0.51000
ATOM    4004  O    LYS A  341    -0.02890  42.11746   4.48723 O_2    1 2 -0.51000
ATOM    4005  CB   LYS A  341    -1.29465  39.67073   5.61104 C_3    4 0  0.00000
ATOM    4006 HCB   LYS A  341    -1.85453  40.52153   6.01224 H_     1 0  0.00000
ATOM    4007 HCB   LYS A  341    -1.47524  38.85159   6.31270 H_     1 0  0.00000
ATOM    4008  CG   LYS A  341    -1.94078  39.26178   4.25144 C_3    4 0  0.00000
ATOM    4009 HCG   LYS A  341    -1.92791  40.13230   3.59165 H_     1 0  0.00000
ATOM    4010 HCG   LYS A  341    -2.99036  39.02173   4.44142 H_     1 0  0.00000
ATOM    4011  CD   LYS A  341    -1.30806  38.06165   3.47819 C_3    4 0  0.00000
ATOM    4012 HCD   LYS A  341    -0.33083  38.35150   3.09052 H_     1 0  0.00000
ATOM    4013 HCD   LYS A  341    -1.93453  37.85906   2.60528 H_     1 0  0.00000
ATOM    4014  CE   LYS A  341    -1.17025  36.74014   4.27874 C_3    4 0  0.31000
ATOM    4015 HCE   LYS A  341    -2.16148  36.32092   4.46774 H_     1 0  0.00000
ATOM    4016 HCE   LYS A  341    -0.68288  36.91427   5.23856 H_     1 0  0.00000
ATOM    4017  NZ   LYS A  341    -0.36542  35.74675   3.55412 N_3    4 0 -0.30000
ATOM    4018 HNZ   LYS A  341     0.58256  36.07736   3.47644 H___A  1 0  0.33000
ATOM    4019 HNZ   LYS A  341    -0.34485  34.87127   4.07518 H___A  1 0  0.33000
ATOM    4020 HNZ   LYS A  341    -0.73819  35.58868   2.61929 H___A  1 0  0.33000
ATOM    4021  N    PHE A  342     1.35048  42.15605   6.26720 N_R    3 0 -0.47000
ATOM    4022 HN    PHE A  342     1.69731  41.71112   7.03987 H___A  1 0  0.31000
ATOM    4023  CA   PHE A  342     1.95200  43.44174   6.05129 C_3    4 0  0.16000
ATOM    4024 HCA   PHE A  342     1.42940  44.00204   5.26957 H_     1 0  0.00000
ATOM    4025  C    PHE A  342     3.34500  43.15854   5.60343 C_R    3 0  0.51000
ATOM    4026  O    PHE A  342     3.70195  43.54094   4.46687 O_2    1 2 -0.51000
ATOM    4027  CB   PHE A  342     1.87712  44.28468   7.36163 C_3    4 0  0.00000
ATOM    4028 HCB   PHE A  342     2.06859  43.63774   8.21254 H_     1 0  0.00000
ATOM    4029 HCB   PHE A  342     0.85512  44.65203   7.48918 H_     1 0  0.00000
ATOM    4030  CG   PHE A  342     2.81627  45.43509   7.43663 C_R    3 0  0.00000
ATOM    4031  CD1  PHE A  342     2.53687  46.63284   6.74354 C_R    3 0  0.00000
ATOM    4032 HCD1  PHE A  342     1.68960  46.71797   6.17658 H_     1 0  0.00000
ATOM    4033  CD2  PHE A  342     4.00489  45.35164   8.20400 C_R    3 0  0.00000
ATOM    4034 HCD2  PHE A  342     4.23166  44.49744   8.71725 H_     1 0  0.00000
ATOM    4035  CE1  PHE A  342     3.41948  47.72360   6.82686 C_R    3 0  0.00000
ATOM    4036 HCE1  PHE A  342     3.20480  48.57744   6.31481 H_     1 0  0.00000
ATOM    4037  CE2  PHE A  342     4.89444  46.43883   8.27628 C_R    3 0  0.00000
ATOM    4038 HCE2  PHE A  342     5.75087  46.36609   8.83040 H_     1 0  0.00000
ATOM    4039  CZ   PHE A  342     4.59564  47.63067   7.59515 C_R    3 0  0.00000
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ATOM    4040 HCZ   PHE A  342    5.23606  48.42317   7.65990 H_      1 0  0.00000
ATOM    4041  N    LEU A  343    4.19439  42.43737   6.37649 N_R     3 0 -0.47000
ATOM    4042 HN    LEU A  343    3.80718  42.07185   7.17963 H___A   1 0  0.31000
ATOM    4043  CA   LEU A  343    5.59350  42.19317   6.09238 C_3     4 0  0.16000
ATOM    4044 HCA   LEU A  343    6.10860  43.14909   6.18173 H_      1 0  0.00000
ATOM    4045  C    LEU A  343    5.85197  41.66722   4.71639 C_R     3 0  0.51000
ATOM    4046  O    LEU A  343    6.70903  42.19344   3.96253 O_2     1 2 -0.51000
ATOM    4047  CB   LEU A  343    6.19648  41.21999   7.15129 C_3     4 0  0.00000
ATOM    4048 HCB   LEU A  343    7.23823  41.00559   6.88734 H_      1 0  0.00000
ATOM    4049 HCB   LEU A  343    5.64936  40.27453   7.08384 H_      1 0  0.00000
ATOM    4050  CG   LEU A  343    6.16171  41.72267   8.63252 C_3     4 0  0.00000
ATOM    4051 HCG   LEU A  343    5.15290  42.06597   8.86652 H_      1 0  0.00000
ATOM    4052  CD1  LEU A  343    6.47743  40.56348   9.61901 C_3     4 0  0.00000
ATOM    4053 HCD1  LEU A  343    7.47281  40.15742   9.42995 H_      1 0  0.00000
ATOM    4054 HCD1  LEU A  343    6.43348  40.91684  10.65047 H_      1 0  0.00000
ATOM    4055 HCD1  LEU A  343    5.74661  39.76112   9.50996 H_      1 0  0.00000
ATOM    4056  CD2  LEU A  343    7.12322  42.91582   8.88262 C_3     4 0  0.00000
ATOM    4057 HCD2  LEU A  343    6.85086  43.77608   8.27211 H_      1 0  0.00000
ATOM    4058 HCD2  LEU A  343    7.07583  43.22891   9.92682 H_      1 0  0.00000
ATOM    4059 HCD2  LEU A  343    8.14960  42.63161   8.64588 H_      1 0  0.00000
ATOM    4060  N    GLU A  344    5.08209  40.66321   4.24131 N_R     3 0 -0.47000
ATOM    4061 HN    GLU A  344    4.41381  40.32918   4.83309 H___A   1 0  0.31000
ATOM    4062  CA   GLU A  344    5.12647  40.08328   2.92913 C_3     4 0  0.16000
ATOM    4063 HCA   GLU A  344    6.04062  39.48592   2.86531 H_      1 0  0.00000
ATOM    4064  C    GLU A  344    5.14440  41.10453   1.84360 C_R     3 0  0.51000
ATOM    4065  O    GLU A  344    5.87455  40.91601   0.83897 O_2     1 2 -0.51000
ATOM    4066  CB   GLU A  344    3.90107  39.13317   2.75197 C_3     4 0  0.00000
ATOM    4067 HCB   GLU A  344    3.77400  38.88626   1.69312 H_      1 0  0.00000
ATOM    4068 HCB   GLU A  344    2.99749  39.66359   3.07125 H_      1 0  0.00000
ATOM    4069  CG   GLU A  344    4.02970  37.79035   3.52707 C_3     4 0 -0.10000
ATOM    4070 HCG   GLU A  344    4.37700  37.96755   4.54730 H_      1 0  0.00000
ATOM    4071 HCG   GLU A  344    4.77907  37.16463   3.03611 H_      1 0  0.00000
ATOM    4072  CD   GLU A  344    2.74883  37.06013   3.58593 C_R     3 0  0.62000
ATOM    4073  OE1  GLU A  344    1.88677  37.29740   4.45378 O_2     1 2 -0.76000
ATOM    4074  OE2  GLU A  344    2.41581  36.17605   2.77022 O_2     1 2 -0.76000
ATOM    4075  N    GLN A  345    4.47454  42.27808   1.96358 N_R     3 0 -0.47000
ATOM    4076 HN    GLN A  345    4.12358  42.53492   2.81908 H___A   1 0  0.31000
ATOM    4077  CA   GLN A  345    4.37037  43.26753   0.93140 C_3     4 0  0.16000
ATOM    4078 HCA   GLN A  345    4.04796  42.75328   0.01855 H_      1 0  0.00000
ATOM    4079  C    GLN A  345    5.65057  43.91909   0.64259 C_2     3 0  0.51000
ATOM    4080  O    GLN A  345    5.71142  44.60170  -0.37145 O_2     1 2 -0.51000
ATOM    4081  CB   GLN A  345    3.25833  44.30017   1.29844 C_3     4 0  0.00000
ATOM    4082 HCB   GLN A  345    3.20258  45.05453   0.50718 H_      1 0  0.00000
ATOM    4083 HCB   GLN A  345    3.53179  44.81847   2.22145 H_      1 0  0.00000
ATOM    4084  CG   GLN A  345    1.84450  43.66499   1.45606 C_3     4 0  0.00000
ATOM    4085 HCG   GLN A  345    1.87478  42.88251   2.21805 H_      1 0  0.00000
ATOM    4086 HCG   GLN A  345    1.55715  43.19838   0.51125 H_      1 0  0.00000
ATOM    4087  CD   GLN A  345    0.80062  44.64895   1.81133 C_R     3 0  0.55000
ATOM    4088  OE1  GLN A  345    0.60446  45.66913   1.11893 O_2     1 2 -0.55000
ATOM    4089  NE2  GLN A  345   -0.02215  44.49020   2.85573 N_R     3 0 -0.60000
ATOM    4090 HNE2  GLN A  345   -0.67471  45.18110   3.03852 H___A   1 0  0.30000
ATOM    4091 HNE2  GLN A  345    0.01631  43.70740   3.39994 H___A   1 0  0.30000
ATOM    4092  N    PHE A  346    6.73075  43.74549   1.39635 N_R     3 0 -0.47000
ATOM    4093 HN    PHE A  346    6.65347  43.21588   2.19838 H___A   1 0  0.31000
ATOM    4094  CA   PHE A  346    8.03826  44.30143   1.13419 C_3     4 0  0.16000
ATOM    4095 HCA   PHE A  346    7.95632  45.09586   0.38982 H_      1 0  0.00000
ATOM    4096  C    PHE A  346    8.98624  43.30002   0.56175 C_R     3 0  0.51000
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ATOM    4097  O    PHE A  346   10.12792  43.69539   0.20888 O_2    1 2 -0.51000
ATOM    4098  CB   PHE A  346    8.58344  44.96205   2.43649 C_3    4 0  0.00000
ATOM    4099 HCB   PHE A  346    9.53655  45.45945   2.24108 H_     1 0  0.00000
ATOM    4100 HCB   PHE A  346    8.77955  44.18189   3.17835 H_     1 0  0.00000
ATOM    4101  CG   PHE A  346    7.61329  45.96050   2.96504 C_R    3 0  0.00000
ATOM    4102  CD1  PHE A  346    6.73617  45.60937   4.01475 C_R    3 0  0.00000
ATOM    4103 HCD1  PHE A  346    6.82605  44.71027   4.48350 H_     1 0  0.00000
ATOM    4104  CD2  PHE A  346    7.47981  47.23679   2.36884 C_R    3 0  0.00000
ATOM    4105 HCD2  PHE A  346    8.10902  47.52593   1.61811 H_     1 0  0.00000
ATOM    4106  CE1  PHE A  346    5.70736  46.47499   4.41185 C_R    3 0  0.00000
ATOM    4107 HCE1  PHE A  346    5.06171  46.18316   5.14392 H_     1 0  0.00000
ATOM    4108  CE2  PHE A  346    6.46090  48.11580   2.78133 C_R    3 0  0.00000
ATOM    4109 HCE2  PHE A  346    6.36296  49.03047   2.33758 H_     1 0  0.00000
ATOM    4110  CZ   PHE A  346    5.56351  47.72599   3.79081 C_R    3 0  0.00000
ATOM    4111 HCZ   PHE A  346    4.80422  48.34667   4.06935 H_     1 0  0.00000
ATOM    4112  N    LYS A  347    8.62879  42.00212   0.35197 N_R    3 0 -0.47000
ATOM    4113 HN    LYS A  347    7.72819  41.73801   0.57627 H___A  1 0  0.31000
ATOM    4114  CA   LYS A  347    9.47509  40.94847  -0.16036 C_3    4 0  0.16000
ATOM    4115 HCA   LYS A  347   10.04021  40.56384   0.69453 H_     1 0  0.00000
ATOM    4116  C    LYS A  347   10.45522  41.34866  -1.21113 C_R    3 0  0.51000
ATOM    4117  O    LYS A  347   11.66334  41.04295  -1.07171 O_2    1 2 -0.51000
ATOM    4118  CB   LYS A  347    8.57157  39.80140  -0.72125 C_3    4 0  0.00000
ATOM    4119 HCB   LYS A  347    9.07720  39.27314  -1.53727 H_     1 0  0.00000
ATOM    4120 HCB   LYS A  347    7.66086  40.23221  -1.14903 H_     1 0  0.00000
ATOM    4121  CG   LYS A  347    8.20328  38.72277   0.33023 C_3    4 0  0.00000
ATOM    4122 HCG   LYS A  347    7.89047  39.19759   1.26176 H_     1 0  0.00000
ATOM    4123 HCG   LYS A  347    9.11020  38.15567   0.55042 H_     1 0  0.00000
ATOM    4124  CD   LYS A  347    7.07456  37.76890  -0.16134 C_3    4 0  0.00000
ATOM    4125 HCD   LYS A  347    7.04617  37.73977  -1.25424 H_     1 0  0.00000
ATOM    4126 HCD   LYS A  347    6.11075  38.16209   0.17293 H_     1 0  0.00000
ATOM    4127  CE   LYS A  347    7.22220  36.31555   0.34381 C_3    4 0  0.31000
ATOM    4128 HCE   LYS A  347    6.31776  35.75891   0.08657 H_     1 0  0.00000
ATOM    4129 HCE   LYS A  347    7.34482  36.29086   1.42907 H_     1 0  0.00000
ATOM    4130  NZ   LYS A  347    8.36105  35.64827  -0.30005 N_3    4 0 -0.30000
ATOM    4131 HNZ   LYS A  347    9.23030  35.89157   0.14734 H___A  1 0  0.33000
ATOM    4132 HNZ   LYS A  347    8.24790  34.65446  -0.23812 H___A  1 0  0.33000
ATOM    4133 HNZ   LYS A  347    8.39962  35.91196  -1.28525 H___A  1 0  0.33000
ATOM    4134  N    GLY A  348   10.02542  42.01698  -2.30500 N_R    3 0 -0.47000
ATOM    4135 HN    GLY A  348    9.09134  42.27742  -2.32316 H___A  1 0  0.31000
ATOM    4136  CA   GLY A  348   10.81987  42.35647  -3.44306 C_3    4 0  0.16000
ATOM    4137 HCA   GLY A  348   10.19305  42.14938  -4.31382 H_     1 0  0.00000
ATOM    4138 HCA   GLY A  348   11.69757  41.70973  -3.52525 H_     1 0  0.00000
ATOM    4139  C    GLY A  348   11.27655  43.76285  -3.50787 C_R    3 0  0.51000
ATOM    4140  O    GLY A  348   11.65636  44.16413  -4.63260 O_2    1 2 -0.51000
ATOM    4141  N    VAL A  349   11.33854  44.59182  -2.43063 N_R    3 0 -0.47000
ATOM    4142 HN    VAL A  349   10.98887  44.26797  -1.59164 H___A  1 0  0.31000
ATOM    4143  CA   VAL A  349   11.86279  45.94872  -2.47038 C_3    4 0  0.16000
ATOM    4144 HCA   VAL A  349   11.17765  46.52051  -3.10871 H_     1 0  0.00000
ATOM    4145  C    VAL A  349   13.21637  46.03469  -3.11504 C_R    3 0  0.51000
ATOM    4146  O    VAL A  349   13.41172  46.91152  -3.98927 O_2    1 2 -0.51000
ATOM    4147  CB   VAL A  349   11.79392  46.58728  -1.03796 C_3    4 0  0.00000
ATOM    4148 HCB   VAL A  349   12.16861  45.84181  -0.33016 H_     1 0  0.00000
ATOM    4149  CG1  VAL A  349   12.64604  47.87350  -0.83171 C_3    4 0  0.00000
ATOM    4150 HCG1  VAL A  349   12.37539  48.63857  -1.56099 H_     1 0  0.00000
ATOM    4151 HCG1  VAL A  349   12.50150  48.27825   0.17168 H_     1 0  0.00000
ATOM    4152 HCG1  VAL A  349   13.70177  47.64281  -0.93343 H_     1 0  0.00000
ATOM    4153  CG2  VAL A  349   10.32411  46.92251  -0.65784 C_3    4 0  0.00000
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ATOM    4154 HCG2  VAL A  349     9.69525  46.04633  -0.77510 H_     1 0  0.00000
ATOM    4155 HCG2  VAL A  349    10.26129  47.25830   0.37749 H_     1 0  0.00000
ATOM    4156 HCG2  VAL A  349     9.92584  47.70723  -1.30362 H_     1 0  0.00000
ATOM    4157  N    LEU A  350    14.19565  45.14346  -2.82537 N_R    3 0 -0.47000
ATOM    4158 HN    LEU A  350    14.01745  44.53201  -2.09649 H___A  1 0  0.31000
ATOM    4159  CA   LEU A  350    15.40758  44.93032  -3.58546 C_3    4 0  0.16000
ATOM    4160 HCA   LEU A  350    15.42762  45.58102  -4.45917 H_     1 0  0.00000
ATOM    4161  C    LEU A  350    15.41190  43.54873  -4.14617 C_R    3 0  0.51000
ATOM    4162  O    LEU A  350    14.62727  42.65638  -3.74678 O_2    1 2 -0.51000
ATOM    4163  CB   LEU A  350    16.69371  45.18684  -2.72544 C_3    4 0  0.00000
ATOM    4164 HCB   LEU A  350    17.50213  44.53169  -3.06582 H_     1 0  0.00000
ATOM    4165 HCB   LEU A  350    16.47911  44.87810  -1.69911 H_     1 0  0.00000
ATOM    4166  CG   LEU A  350    17.30418  46.62846  -2.70212 C_3    4 0  0.00000
ATOM    4167 HCG   LEU A  350    18.23209  46.55550  -2.12380 H_     1 0  0.00000
ATOM    4168  CD1  LEU A  350    17.72939  47.16144  -4.10027 C_3    4 0  0.00000
ATOM    4169 HCD1  LEU A  350    16.86802  47.31652  -4.74897 H_     1 0  0.00000
ATOM    4170 HCD1  LEU A  350    18.24534  48.11761  -3.99846 H_     1 0  0.00000
ATOM    4171 HCD1  LEU A  350    18.41175  46.45911  -4.58162 H_     1 0  0.00000
ATOM    4172  CD2  LEU A  350    16.42790  47.66078  -1.95250 C_3    4 0  0.00000
ATOM    4173 HCD2  LEU A  350    16.22191  47.31547  -0.93768 H_     1 0  0.00000
ATOM    4174 HCD2  LEU A  350    16.94265  48.62060  -1.88307 H_     1 0  0.00000
ATOM    4175 HCD2  LEU A  350    15.48961  47.81459  -2.47997 H_     1 0  0.00000
ATOM    4176  OXT  LEU A  350    16.28984  43.19780  -5.11902 O_3    2 2  0.00000
ATOM    4177 HOXT  LEU A  350    17.17051  43.46872  -4.78568 H___A  1 0  0.00000
HETATM  4178  N    RES A  444    19.10800  62.52300  20.01400 N_3    4 0 -0.47000
HETATM  4179 HN    RES A  444    18.83189  61.73269  19.46704 H___A  1 0  0.10334
HETATM  4180 HN    RES A  444    19.98024  62.90530  19.70897 H___A  1 0  0.10333
HETATM  4181 HN    RES A  444    19.10773  62.32118  20.99342 H___A  1 0  0.10333
HETATM  4182  CA   RES A  444    18.08400  63.57100  19.79500 C_3    4 0  0.16000
HETATM  4183 HCA   RES A  444    18.36582  64.45194  20.37173 H_     1 0  0.00000
HETATM  4184  C    RES A  444    16.72600  63.11300  20.21700 C_R    3 0  0.51000
HETATM  4185  O    RES A  444    16.32300  61.82800  20.07300 O_2    1 2 -0.25500
HETATM  4186  CB   RES A  444    18.01400  63.94400  18.32200 C_3    4 0  0.00000
HETATM  4187 HCB   RES A  444    17.77308  63.13583  17.78458 H_     1 0  0.00000
HETATM  4188 HCB   RES A  444    17.31956  64.65132  18.18990 H_     1 0  0.00000
HETATM  4189 HCB   RES A  444    18.90334  64.29006  18.02315 H_     1 0  0.00000
HETATM  4190  OXT  RES A  444    15.85400  63.94800  20.81900 O_2    1 2 -0.25500

A
      1  N1        -0.7183   -0.4349    0.6025 N.4       1 RES444    -0.7931
      2  H2        -0.6460   -1.4463    0.7574 H         1 RES444     0.3556
      3  H3        -0.5035    0.0293    1.4948 H         1 RES444     0.3556
      4  H4        -1.6728   -0.1973    0.3235 H         1 RES444     0.3556
      5  C5         0.2891    0.0166   -0.4164 C.3       1 RES444    -0.0639
      6  H6         0.1447   -0.5202   -1.3639 H         1 RES444     0.1982
      7  C7         1.7443   -0.2114   -0.0831 C.2       1 RES444     0.8291
      8  O8         2.4852   -0.8361   -0.8723 O.2       1 RES444    -0.6532
      9  C9        -0.0723    1.5099   -0.6356 C.3       1 RES444    -0.3372
     10  H10        0.0859    2.0831    0.2830 H         1 RES444     0.1355
     11  H11        0.5708    1.9398   -1.4096 H         1 RES444     0.1355
     12  H12       -1.1096    1.6303   -0.9560 H         1 RES444     0.1355
     13  O13        2.1884    0.1846    1.0168 O.2       1 RES444    -0.6532
C
      1  N1        -0.6269    2.3362   -1.0139 N.4       1 RES444    -0.7789
      2  H2        -1.4430    2.6532   -1.5416 H         1 RES444     0.3577
      3  H3        -0.0136    3.1395   -0.8247 H         1 RES444     0.3577
      4  H4        -0.9306    1.9599   -0.1090 H         1 RES444     0.3577
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	5	C5	0.1599	1.3075	-1.7745	C.3	1 RES444	-0.0551
	6	H6	-0.4455	0.4039	-1.9369	H	1 RES444	0.2062
	7	C7	1.4141	0.7937	-1.1032	C.2	1 RES444	0.8321
	8	O8	1.5766	-0.4289	-0.9010	O.2	1 RES444	-0.6408
	9	C9	0.4005	2.0042	-3.1450	C.3	1 RES444	-0.3811
	10	H10	1.1146	2.8279	-3.0315	H	1 RES444	0.1942
	11	H11	-0.5245	2.4055	-3.5671	H	1 RES444	0.1942
	12	S12	1.0724	0.8487	-4.3630	S.3	1 RES444	-0.1296
	13	H13	2.1354	0.5028	-3.5829	H	1 RES444	0.1266
	14	O14	2.2731	1.6126	-0.7073	O.2	1 RES444	-0.6409
D								
	1	N1	-0.8109	2.0993	-1.1149	N.4	1 RES444	-0.7867
	2	H2	-1.4150	2.3444	-1.8913	H	1 RES444	0.3584
	3	H3	-0.3434	2.9418	-0.7603	H	1 RES444	0.3584
	4	H4	-1.3237	1.6337	-0.3674	H	1 RES444	0.3584
	5	C5	0.2373	1.2172	-1.7115	C.3	1 RES444	-0.0556
	6	H6	-0.1029	0.1742	-1.7366	H	1 RES444	0.1740
	7	C7	1.5409	1.1676	-0.9568	C.2	1 RES444	0.7709
	8	O8	2.0023	0.0825	-0.5423	O.2	1 RES444	-0.8321
	9	C9	0.3656	1.7407	-3.1837	C.3	1 RES444	-0.3520
	10	H10	1.1290	1.1537	-3.6926	H	1 RES444	0.1902
	11	H11	0.7058	2.7732	-3.1807	H	1 RES444	0.1902
	12	C12	-0.8140	1.7010	-4.0079	C.2	1 RES444	0.8134
	13	O13	-1.7816	2.4014	-3.7402	O.2	1 RES444	-0.6777
	14	O14	-0.8590	0.9854	-4.9904	O.2	1 RES444	-0.6777
	15	O15	2.1328	2.2384	-0.6949	O.2	1 RES444	-0.8321
E								
	1	N1	-0.0848	2.6480	-0.3232	N.4	1 RES444	-0.8024
	2	H2	0.7332	3.2714	-0.3741	H	1 RES444	0.3698
	3	H3	-0.1762	2.3303	0.6430	H	1 RES444	0.3698
	4	H4	-0.9134	3.1467	-0.6426	H	1 RES444	0.3698
	5	C5	0.2476	1.4901	-1.2148	C.3	1 RES444	-0.0153
	6	H6	-0.4529	0.6624	-1.0603	H	1 RES444	0.1543
	7	C7	1.6003	0.8887	-0.9417	C.2	1 RES444	0.7655
	8	O8	1.7178	-0.3243	-0.6630	O.2	1 RES444	-0.8355
	9	C9	0.0714	2.0342	-2.6645	C.3	1 RES444	-0.2666
	10	H10	0.5774	1.3541	-3.3627	H	1 RES444	0.1611
	11	H11	0.5914	2.9976	-2.7565	H	1 RES444	0.1478
	12	C12	-1.4316	2.1679	-3.1038	C.3	1 RES444	-0.3454
	13	H13	-2.0373	2.6295	-2.3316	H	1 RES444	0.1755
	14	H14	-1.8432	1.1783	-3.3024	H	1 RES444	0.1755
	15	C15	-1.6801	2.9734	-4.2669	C.2	1 RES444	0.7992
	16	O16	-2.1944	2.4872	-5.2582	O.2	1 RES444	-0.6938
	17	O17	-1.4589	4.1699	-4.2117	O.2	1 RES444	-0.6938
	18	O18	2.5962	1.6427	-0.8713	O.2	1 RES444	-0.8355
F								
	1	N1	1.9154	0.6605	-1.5625	N.4	1 RES444	-0.7765
	2	H2	1.6819	0.7300	-2.5624	H	1 RES444	0.3550
	3	H3	1.2454	0.0088	-1.1372	H	1 RES444	0.3550
	4	H4	2.8614	0.2851	-1.4623	H	1 RES444	0.3550
	5	C5	1.7806	2.0276	-0.9401	C.3	1 RES444	-0.0785
	6	H6	1.9320	1.9602	0.1456	H	1 RES444	0.1920
	7	C7	0.4291	2.6845	-1.0828	C.2	1 RES444	0.8452
	8	O8	-0.2632	2.9549	-0.0784	O.2	1 RES444	-0.6471
	9	C9	2.9383	2.8714	-1.5579	C.3	1 RES444	-0.2201
	10	H10	2.7186	3.0588	-2.6149	H	1 RES444	0.1534
	11	H11	3.8827	2.3220	-1.5344	H	1 RES444	0.1534

	12	C12	3.1408	4.1625	-0.8517	C.2	1 RES444	-0.0150
	13	C13	2.5868	5.3594	-1.3580	C.2	1 RES444	-0.1806
	14	H14	2.0266	5.3476	-2.2151	H	1 RES444	0.1658
	15	C15	3.8825	4.2114	0.3507	C.2	1 RES444	-0.1716
	16	H16	4.2862	3.3587	0.7424	H	1 RES444	0.1651
	17	C17	2.7773	6.5806	-0.6839	C.2	1 RES444	-0.1602
	18	H18	2.3663	7.4413	-1.0574	H	1 RES444	0.1689
	19	C19	4.0752	5.4310	1.0273	C.2	1 RES444	-0.1650
	20	H20	4.6130	5.4574	1.8980	H	1 RES444	0.1670
	21	C21	3.5231	6.6157	0.5080	C.2	1 RES444	-0.1800
	22	H22	3.6585	7.5031	0.9997	H	1 RES444	0.1660
	23	O23	-0.0383	2.8560	-2.2313	O.2	1 RES444	-0.6472
G								
	1	N1	-0.8031	-0.3686	0.4190	N.4	1 RES444	-0.7999
	2	H2	-0.6391	0.1962	1.2671	H	1 RES444	0.3580
	3	H3	-1.7431	-0.1649	0.0624	H	1 RES444	0.3580
	4	H4	-0.7596	-1.3564	0.7034	H	1 RES444	0.3580
	5	C5	0.2823	-0.0606	-0.6001	C.3	1 RES444	-0.1335
	6	H6	0.2113	0.9748	-0.9416	H	1 RES444	0.1828
	7	H7	0.1874	-0.7028	-1.4806	H	1 RES444	0.1828
	8	C8	1.6915	-0.1794	-0.1620	C.2	1 RES444	0.7978
	9	O9	2.4699	-0.9596	-0.7458	O.2	1 RES444	-0.6520
	10	O10	2.0661	0.5110	0.8073	O.2	1 RES444	-0.6520
H								
	1	N1	2.2015	2.6326	-0.7057	N.4	1 RES444	-0.7873
	2	H2	2.6335	3.5600	-0.6984	H	1 RES444	0.3573
	3	H3	2.7084	2.0289	-1.3660	H	1 RES444	0.3573
	4	H4	2.2991	2.2155	0.2304	H	1 RES444	0.3573
	5	C5	0.7452	2.6904	-1.0862	C.3	1 RES444	-0.0712
	6	H6	0.1888	3.3056	-0.3632	H	1 RES444	0.1972
	7	C7	0.0084	1.3667	-1.0242	C.2	1 RES444	0.8319
	8	O8	-0.5054	1.0078	0.0553	O.2	1 RES444	-0.6404
	9	C9	0.7343	3.4431	-2.4603	C.3	1 RES444	-0.2519
	10	H10	1.2655	2.8468	-3.2069	H	1 RES444	0.1716
	11	H11	1.2371	4.4076	-2.3724	H	1 RES444	0.1716
	12	C12	-0.6070	3.6815	-3.0127	C.2	1 RES444	0.2352
	13	N13	-1.4602	2.7011	-3.2632	N.3	1 RES444	-0.6676
	14	H14	-1.2365	1.7897	-3.0436	H	1 RES444	0.3809
	15	C15	-1.2502	4.8512	-3.3918	C.2	1 RES444	-0.0308
	16	H16	-0.8705	5.7965	-3.3301	H	1 RES444	0.1690
	17	C17	-2.5952	3.1859	-3.7793	C.2	1 RES444	0.3476
	18	H18	-3.4232	2.6477	-4.0601	H	1 RES444	0.1964
	19	N19	-2.4660	4.5212	-3.8604	N.3	1 RES444	-0.6837
	20	O20	-0.0556	0.5936	-2.0096	O.2	1 RES444	-0.6404
I								
	1	N1	2.1681	3.0215	-0.7045	N.4	1 RES444	-0.8025
	2	H2	2.4339	3.9540	-1.0221	H	1 RES444	0.3585
	3	H3	2.8174	2.3332	-1.1041	H	1 RES444	0.3585
	4	H4	2.2514	2.9520	0.3144	H	1 RES444	0.3585
	5	C5	0.7754	2.6525	-1.1657	C.3	1 RES444	-0.0651
	6	H6	0.0491	3.0930	-0.4745	H	1 RES444	0.2076
	7	C7	0.4050	1.1987	-1.0822	C.2	1 RES444	0.8296
	8	O8	-0.7847	0.8430	-1.2196	O.2	1 RES444	-0.6557
	9	C9	0.4904	3.2547	-2.5879	C.3	1 RES444	-0.1253
	10	H10	-0.5597	3.0005	-2.8080	H	1 RES444	0.1386
	11	C11	1.3023	2.6268	-3.7688	C.3	1 RES444	-0.2229
	12	H12	0.8455	2.9618	-4.7073	H	1 RES444	0.1265

13	H13	1.1758	1.5375	-3.7472	H	1	RES444	0.1265
14	C14	0.5308	4.8094	-2.6044	C.3	1	RES444	-0.3384
15	H15	1.5253	5.1937	-2.3833	H	1	RES444	0.1221
16	H16	0.2368	5.1835	-3.5886	H	1	RES444	0.1221
17	H17	-0.1684	5.2199	-1.8722	H	1	RES444	0.1221
18	C18	2.8205	2.9372	-3.8520	C.3	1	RES444	-0.3614
19	H19	3.3672	2.4637	-3.0386	H	1	RES444	0.1188
20	H20	3.2217	2.5365	-4.7870	H	1	RES444	0.1188
21	H21	3.0104	4.0108	-3.8430	H	1	RES444	0.1188
22	O22	1.2891	0.3503	-0.8317	O.2	1	RES444	-0.6557

K

1	N1	1.9947	0.9649	-1.2190	N.4	1	RES444	-0.5694
2	H2	1.7399	0.6243	-2.1586	H	1	RES444	0.4023
3	H3	1.3901	0.4247	-0.5874	H	1	RES444	0.4023
4	H4	2.9775	0.7881	-1.0165	H	1	RES444	0.4023
5	C5	1.5990	2.4154	-1.1729	C.3	1	RES444	-0.1303
6	H6	1.4751	2.7567	-0.1379	H	1	RES444	0.2151
7	C7	0.2358	2.6410	-1.7267	C.2	1	RES444	0.8105
8	O8	-0.2690	3.7760	-1.7021	O.2	1	RES444	-0.8159
9	C9	2.6864	3.2905	-1.8812	C.3	1	RES444	-0.2199
10	H10	3.6800	3.0556	-1.4878	H	1	RES444	0.1528
11	H11	2.4738	4.3357	-1.6115	H	1	RES444	0.1528
12	C12	2.6707	3.1815	-3.4379	C.3	1	RES444	-0.2426
13	H13	1.6507	3.3988	-3.7879	H	1	RES444	0.1362
14	H14	2.9030	2.1555	-3.7409	H	1	RES444	0.1362
15	C15	3.6461	4.1821	-4.1193	C.3	1	RES444	-0.2358
16	H16	4.6765	3.8996	-3.8732	H	1	RES444	0.1466
17	H17	3.4631	5.1845	-3.7101	H	1	RES444	0.1466
18	C18	3.4368	4.2118	-5.6535	C.3	1	RES444	-0.0796
19	H19	2.3936	4.5026	-5.8749	H	1	RES444	0.1874
20	H20	3.5791	3.2002	-6.0700	H	1	RES444	0.1874
21	N21	4.3953	5.1847	-6.2418	N.4	1	RES444	-0.5832
22	H22	4.2819	5.2529	-7.2618	H	1	RES444	0.4047
23	H23	5.3660	4.9125	-6.0485	H	1	RES444	0.4047
24	H24	4.2474	6.1231	-5.8491	H	1	RES444	0.4047
25	O25	-0.2759	1.6657	-2.3140	O.2	1	RES444	-0.8159

L

1	N1	2.6709	1.6791	-0.9022	N.4	1	RES444	-0.7918
2	H2	3.5874	2.1007	-1.0672	H	1	RES444	0.3569
3	H3	2.5164	0.9220	-1.5818	H	1	RES444	0.3569
4	H4	2.6496	1.2599	0.0342	H	1	RES444	0.3569
5	C5	1.5543	2.6794	-1.0518	C.3	1	RES444	-0.0405
6	H6	1.6224	3.4205	-0.2465	H	1	RES444	0.1713
7	C7	0.1637	2.1140	-0.9286	C.2	1	RES444	0.8134
8	O8	-0.6338	2.5587	-0.0754	O.2	1	RES444	-0.6527
9	C9	1.8376	3.4075	-2.4037	C.3	1	RES444	-0.2358
10	H10	1.7553	2.6874	-3.2251	H	1	RES444	0.1461
11	H11	2.8784	3.7431	-2.3879	H	1	RES444	0.1461
12	C12	0.9162	4.6401	-2.6925	C.3	1	RES444	-0.1411
13	H13	0.5780	5.0818	-1.7433	H	1	RES444	0.1309
14	C14	1.6839	5.7401	-3.4703	C.3	1	RES444	-0.3356
15	H15	2.0522	5.3568	-4.4247	H	1	RES444	0.1179
16	H16	1.0328	6.5948	-3.6698	H	1	RES444	0.1179
17	H17	2.5327	6.1022	-2.8869	H	1	RES444	0.1179
18	C18	-0.3419	4.2489	-3.5113	C.3	1	RES444	-0.3344
19	H19	-0.9364	3.4980	-2.9879	H	1	RES444	0.1175
20	H20	-0.9845	5.1181	-3.6675	H	1	RES444	0.1175

	21	H21	-0.0676	3.8444	-4.4878	H	1 RES444	0.1175
	22	O22	-0.1620	1.1365	-1.6380	O.2	1 RES444	-0.6528
M								
	1	N1	1.9942	0.9676	-1.1617	N.4	1 RES444	-0.8004
	2	H2	2.0027	0.7667	-2.1703	H	1 RES444	0.3600
	3	H3	1.3347	0.3122	-0.7263	H	1 RES444	0.3600
	4	H4	2.9288	0.8147	-0.7762	H	1 RES444	0.3600
	5	C5	1.5232	2.3889	-0.9626	C.3	1 RES444	-0.0542
	6	H6	1.4366	2.6072	0.1091	H	1 RES444	0.2051
	7	C7	0.1461	2.6857	-1.5029	C.2	1 RES444	0.8331
	8	O8	-0.7880	2.9963	-0.7318	O.2	1 RES444	-0.6554
	9	C9	2.6467	3.2918	-1.5667	C.3	1 RES444	-0.2236
	10	H10	2.5301	3.3302	-2.6556	H	1 RES444	0.1515
	11	H11	3.6261	2.8392	-1.3792	H	1 RES444	0.1515
	12	C12	2.7059	4.7380	-0.9850	C.3	1 RES444	-0.3865
	13	H13	3.5721	5.2698	-1.3875	H	1 RES444	0.1746
	14	H14	2.8472	4.6886	0.0972	H	1 RES444	0.1746
	15	S15	1.2429	5.7679	-1.2487	S.3	1 RES444	0.0006
	16	C16	1.5306	6.1534	-2.9845	C.3	1 RES444	-0.4941
	17	H17	1.4866	5.2480	-3.5880	H	1 RES444	0.1662
	18	H18	0.7372	6.8217	-3.3191	H	1 RES444	0.1662
	19	H19	2.4894	6.6520	-3.1172	H	1 RES444	0.1662
	20	O20	-0.0844	2.4860	-2.7169	O.2	1 RES444	-0.6554
N								
	1	N1	-0.7586	2.1317	-0.4563	N.4	1 RES444	-0.5660
	2	H2	-1.6693	2.4261	-0.8002	H	1 RES444	0.4016
	3	H3	-0.1555	2.9484	-0.2787	H	1 RES444	0.4016
	4	H4	-0.8420	1.5874	0.4049	H	1 RES444	0.4016
	5	C5	-0.1471	1.3423	-1.5677	C.3	1 RES444	-0.1182
	6	H6	-0.5463	0.3181	-1.6014	H	1 RES444	0.2175
	7	C7	1.3168	1.1611	-1.3702	C.2	1 RES444	0.8038
	8	O8	1.8231	0.0260	-1.4016	O.2	1 RES444	-0.8102
	9	C9	-0.4997	2.0994	-2.9024	C.3	1 RES444	-0.3455
	10	H10	-0.1511	1.4901	-3.7368	H	1 RES444	0.2061
	11	H11	0.0467	3.0434	-2.9429	H	1 RES444	0.2061
	12	C12	-1.8936	2.4328	-3.1818	C.2	1 RES444	0.7787
	13	O13	-2.7745	2.5242	-2.3127	O.2	1 RES444	-0.7352
	14	N14	-2.3308	2.7566	-4.3727	N.3	1 RES444	-0.7617
	15	H15	-1.7554	2.7694	-5.1387	H	1 RES444	0.3650
	16	H16	-3.2664	2.9809	-4.4190	H	1 RES444	0.3650
	17	O17	1.9551	2.1964	-1.0933	O.2	1 RES444	-0.8102
P								
	1	N1	2.3647	1.0002	-0.8895	N.4	1 RES444	-0.5902
	2	H2	1.9074	0.7830	-1.8003	H	1 RES444	0.4070
	3	H3	2.0146	0.3104	-0.2126	H	1 RES444	0.4070
	4	C4	1.8027	2.3591	-0.5998	C.3	1 RES444	-0.0693
	5	H5	1.6523	2.5252	0.4732	H	1 RES444	0.2149
	6	C6	0.4926	2.5818	-1.2090	C.2	1 RES444	0.8017
	7	O7	-0.4113	3.0876	-0.5728	O.2	1 RES444	-0.8147
	8	C8	2.9244	3.2818	-1.1259	C.3	1 RES444	-0.2484
	9	H9	2.8709	4.2785	-0.6724	H	1 RES444	0.1645
	10	H10	2.8438	3.3935	-2.2167	H	1 RES444	0.1598
	11	C11	4.2026	2.5197	-0.7443	C.3	1 RES444	-0.2486
	12	H12	4.4252	2.6683	0.3195	H	1 RES444	0.1548
	13	H13	5.0639	2.8557	-1.3328	H	1 RES444	0.1610
	14	C14	3.8428	1.0492	-1.0211	C.3	1 RES444	-0.0665
	15	H15	4.3532	0.3760	-0.3178	H	1 RES444	0.1904

	16	H16	4.1449	0.7727	-2.0429	H	1 RES444	0.1913
	17	O17	0.3144	2.1014	-2.3182	O.2	1 RES444	-0.8147
Q								
	1	N1	0.2365	2.9182	-0.6239	N.4	1 RES444	-0.7907
	2	H2	1.0739	3.3956	-0.9825	H	1 RES444	0.3572
	3	H3	0.3302	2.8781	0.3986	H	1 RES444	0.3572
	4	H4	-0.5973	3.4571	-0.8699	H	1 RES444	0.3572
	5	C5	0.2072	1.5242	-1.2036	C.3	1 RES444	-0.0823
	6	H6	-0.5621	0.9348	-0.6855	H	1 RES444	0.2093
	7	C7	1.4310	0.7128	-1.0194	C.2	1 RES444	0.8329
	8	O8	1.3784	-0.3982	-0.5200	O.2	1 RES444	-0.6515
	9	C9	-0.2502	1.6534	-2.6911	C.3	1 RES444	-0.2122
	10	H10	-1.2004	2.1992	-2.7329	H	1 RES444	0.1552
	11	H11	-0.4609	0.6444	-3.0799	H	1 RES444	0.1552
	12	C12	0.7887	2.3272	-3.6501	C.3	1 RES444	-0.3259
	13	H13	1.6714	1.6912	-3.7461	H	1 RES444	0.1657
	14	H14	1.1113	3.2919	-3.2683	H	1 RES444	0.1657
	15	C15	0.3039	2.5046	-5.0139	C.2	1 RES444	0.7379
	16	O16	-0.1273	1.5763	-5.7044	O.2	1 RES444	-0.7360
	17	N17	0.2477	3.6520	-5.6474	N.3	1 RES444	-0.7610
	18	H18	0.5417	4.4690	-5.2510	H	1 RES444	0.3588
	19	H19	-0.1019	3.5953	-6.5430	H	1 RES444	0.3588
	20	O20	2.5145	1.2053	-1.2919	O.2	1 RES444	-0.6515
R								
	1	N1	-1.3523	1.5018	-0.7956	N.4	1 RES444	-0.5770
	2	H2	-2.2735	1.1488	-1.0491	H	1 RES444	0.4042
	3	H3	-1.3526	2.5335	-0.7533	H	1 RES444	0.4042
	4	H4	-1.1092	1.1915	0.1543	H	1 RES444	0.4042
	5	C5	-0.2612	1.1095	-1.7530	C.3	1 RES444	-0.1040
	6	H6	0.0580	0.0748	-1.5529	H	1 RES444	0.2099
	7	C7	0.9791	1.8820	-1.4543	C.2	1 RES444	0.8080
	8	O8	2.0951	1.3394	-1.4653	O.2	1 RES444	-0.8030
	9	C9	-0.7766	1.2017	-3.2427	C.3	1 RES444	-0.2500
	10	H10	-1.8677	1.2645	-3.2847	H	1 RES444	0.1592
	11	H11	-0.5102	0.2529	-3.7307	H	1 RES444	0.1592
	12	C12	-0.1585	2.3284	-4.1392	C.3	1 RES444	-0.2183
	13	H13	-0.3777	2.1173	-5.1927	H	1 RES444	0.1423
	14	H14	0.9379	2.2670	-4.0635	H	1 RES444	0.1423
	15	C15	-0.5977	3.7787	-3.7949	C.3	1 RES444	-0.0307
	16	H16	0.2780	4.4386	-3.8867	H	1 RES444	0.1666
	17	H17	-0.8977	3.8544	-2.7430	H	1 RES444	0.1666
	18	N18	-1.7059	4.1459	-4.6458	N.3	1 RES444	-0.7402
	19	H19	-2.4764	3.5722	-4.6482	H	1 RES444	0.3782
	20	C20	-1.8118	5.1804	-5.4570	C.2	1 RES444	1.0011
	21	N21	-2.9016	5.3038	-6.1493	N.2	1 RES444	-0.7758
	22	H22	-3.5947	4.6495	-6.0612	H	1 RES444	0.3839
	23	H23	-2.9973	6.0502	-6.7434	H	1 RES444	0.3839
	24	N24	-0.9146	6.0999	-5.6247	N.3	1 RES444	-0.8012
	25	H25	-0.0997	6.0425	-5.1236	H	1 RES444	0.3947
	26	H26	-1.0707	6.8193	-6.2373	H	1 RES444	0.3947
	27	O27	0.8071	3.0806	-1.1427	O.2	1 RES444	-0.8030
S								
	1	N1	2.4884	0.9747	-0.9956	N.4	1 RES444	-0.7910
	2	H2	3.3647	0.8399	-0.4806	H	1 RES444	0.3593
	3	H3	2.6690	0.9100	-2.0065	H	1 RES444	0.3593
	4	H4	1.8482	0.1994	-0.7739	H	1 RES444	0.3593
	5	C5	1.8133	2.3023	-0.6757	C.3	1 RES444	-0.0873

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      6  H6         1.5412    2.3404    0.3851 H         1 RES444     0.2076
      7  C7         0.5038    2.5812   -1.3550 C.2       1 RES444     0.8352
      8  O8        -0.1748    3.5963   -1.0775 O.2       1 RES444    -0.6716
      9  C9         2.8055    3.4680   -0.9369 C.3       1 RES444     0.1126
     10  H10        2.9241    3.6472   -2.0125 H         1 RES444     0.1404
     11  H11        3.7914    3.2391   -0.5207 H         1 RES444     0.1404
     12  O12        2.3216    4.6436   -0.2958 O.3       1 RES444    -0.7259
     13  H13        1.3627    4.6077   -0.5186 H         1 RES444     0.3877
     14  O14        0.0915    1.7681   -2.2080 O.2       1 RES444    -0.6260
T
      1  N1         2.2244    0.9749   -0.3230 N.4       1 RES444    -0.5846
      2  H2         2.8605    0.9351    0.4734 H         1 RES444     0.4038
      3  H3         2.7697    0.7787   -1.1790 H         1 RES444     0.4038
      4  H4         1.4952    0.2559   -0.2561 H         1 RES444     0.4038
      5  C5         1.6198    2.3493   -0.5239 C.3       1 RES444    -0.1328
      6  H6         1.0145    2.6716    0.3281 H         1 RES444     0.2221
      7  C7         0.6856    2.3705   -1.6700 C.2       1 RES444     0.8104
      8  O8        -0.4933    2.7178   -1.4916 O.2       1 RES444    -0.8075
      9  C9         2.7166    3.4172   -0.7905 C.3       1 RES444     0.1974
     10  H10        2.2788    4.3671   -1.1488 H         1 RES444     0.1649
     11  O11        3.5769    2.8704   -1.7729 O.3       1 RES444    -0.7156
     12  H12        2.8953    2.5827   -2.4312 H         1 RES444     0.3875
     13  C13        3.6236    3.6923    0.4177 C.3       1 RES444    -0.3537
     14  H14        4.1676    2.7957    0.7125 H         1 RES444     0.1360
     15  H15        4.3600    4.4490    0.1376 H         1 RES444     0.1360
     16  H16        3.0441    4.0672    1.2618 H         1 RES444     0.1360
     17  O17        1.1090    1.9440   -2.7665 O.2       1 RES444    -0.8075
V
      1  N1         2.9309    1.4357   -1.3722 N.4       1 RES444    -0.7993
      2  H2         3.8872    1.5345   -1.0292 H         1 RES444     0.3571
      3  H3         2.9033    1.6719   -2.3727 H         1 RES444     0.3571
      4  H4         2.6318    0.4589   -1.2755 H         1 RES444     0.3571
      5  C5         1.9803    2.3565   -0.6376 C.3       1 RES444    -0.0503
      6  H6         1.9392    2.0798    0.4220 H         1 RES444     0.1965
      7  C7         0.5479    2.2570   -1.0905 C.2       1 RES444     0.8317
      8  O8        -0.3526    1.9213   -0.2900 O.2       1 RES444    -0.6498
      9  C9         2.5452    3.8181   -0.7211 C.3       1 RES444    -0.1335
     10  H10        2.6037    4.1013   -1.7829 H         1 RES444     0.1376
     11  C11        1.6201    4.8474   -0.0092 C.3       1 RES444    -0.3468
     12  H12        1.4774    4.5890    1.0427 H         1 RES444     0.1238
     13  H13        2.0379    5.8555   -0.0637 H         1 RES444     0.1238
     14  H14        0.6371    4.8860   -0.4869 H         1 RES444     0.1238
     15  C15        3.9630    3.9514   -0.0949 C.3       1 RES444    -0.3420
     16  H16        4.6972    3.3609   -0.6419 H         1 RES444     0.1210
     17  H17        4.3035    4.9898   -0.1297 H         1 RES444     0.1210
     18  H18        3.9588    3.6307    0.9498 H         1 RES444     0.1210
     19  O19        0.2709    2.4456   -2.2955 O.2       1 RES444    -0.6498
W
      1  N1         3.0363    1.6404   -0.8698 N.4       1 RES444    -0.7999
      2  H2         3.7485    1.9685   -0.2064 H         1 RES444     0.3568
      3  H3         3.3618    1.8248   -1.8264 H         1 RES444     0.3568
      4  H4         2.9100    0.6284   -0.7672 H         1 RES444     0.3568
      5  C5         1.7401    2.3776   -0.6493 C.3       1 RES444    -0.0534
      6  H6         1.3058    2.0924    0.3178 H         1 RES444     0.2005
      7  C7         0.6305    2.1007   -1.6276 C.2       1 RES444     0.8362
      8  O8        -0.4759    1.6803   -1.2261 O.2       1 RES444    -0.6546
      9  C9         2.1190    3.8891   -0.5983 C.3       1 RES444    -0.2230
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10	H10	1.2109	4.5022	-0.5842	H	1	RES444	0.1507
11	H11	2.6548	4.1693	-1.5106	H	1	RES444	0.1516
12	C12	2.9279	4.2324	0.5947	C.2	1	RES444	-0.1136
13	C13	2.4334	4.5294	1.8691	C.2	1	RES444	0.1109
14	H14	1.4389	4.5601	2.1211	H	1	RES444	0.2030
15	C15	4.3164	4.3140	0.6961	C.2	1	RES444	-0.1012
16	N16	3.4663	4.7672	2.7013	N.3	1	RES444	-0.7358
17	H17	3.4069	4.9984	3.6404	H	1	RES444	0.3639
18	C18	4.6096	4.6426	2.0187	C.2	1	RES444	0.2679
19	C19	5.3500	4.1293	-0.2439	C.2	1	RES444	-0.1331
20	H20	5.1408	3.9085	-1.2193	H	1	RES444	0.1720
21	C21	5.9301	4.7905	2.4615	C.2	1	RES444	-0.1702
22	H22	6.1145	5.0337	3.4341	H	1	RES444	0.1784
23	C23	6.6871	4.2676	0.1909	C.2	1	RES444	-0.2100
24	H24	7.4537	4.1349	-0.4752	H	1	RES444	0.1635
25	C25	6.9792	4.5960	1.5354	C.2	1	RES444	-0.1888
26	H26	7.9531	4.6973	1.8377	H	1	RES444	0.1693
27	O27	0.8336	2.2733	-2.8486	O.2	1	RES444	-0.6547